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NASA-CR 167,694

RESULTS OF THE AFRSI REWATERPROOFING
SYSTEMS SCREENING TEST
IN THE NASA/AMES RESEARCH CENTER (ARC)
2x2-FOOT TRANSONIC WIND TUNNEL
(OS-310)

(NASA-CR-167694) RESULTS OF THE AFRSI
REWATERPROOFING SYSTEMS SCREENING TEST IN
THE NASA/AMES RESEARCH CENTER (ARC) 2 X
2-FOOT TRANSONIC WIND TUNNEL (Chrysler
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Data ManAGEMENT SERVICES

MICHoud ENGINEERING OFFICE



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RESULTS OF THE AFRS1 REWATERPROOFING
SYSTEMS SCREENING TEST
IN THE NASA/AMES RESEARCH CENTER (ARC)
2x2-FOOT TRANSONIC WIND TUNNEL
(OS-310)

by

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Space Transportation Systems Division

Prepared under NASA Contract Number NAS9-17179

by

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Chrysler Military-Public Electronic Systems
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for

Systems Engineering Division
Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WIND TUNNEL TEST SPECIFICS:

Test Facility: ARC 2x2-Foot
Facility Test Number: 560-1-22
NASA Series Number: OS-310
Model Number: 126-0
Test Start Date: November 10, 1982
Test Completion Date: November 23, 1982
Occupancy Hours: 80

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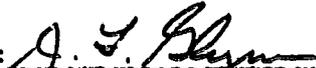
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by

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ABSTRACT

An experimental investigation was conducted in the NASA/Ames Research Center 2x2-foot Transonic Wind Tunnel from November 10 through 23, 1982 to evaluate two AFRSI rewaterproofing systems and to investigate films as a means of reducing blanket joint distortion. The wind tunnel wall slot configuration influence on the flow field over the test panel was investigated, primarily using oil flow data, and resulted in a closed slot configuration to provide a satisfactory screening environment flow field for the test. Sixteen AFRSI test panels, configured to represent the test system or film, were subjected to this screening environment (a flow field of separated and reattached flow at a freestream Mach number of 0.65 and $q = 650$ or 900 psf). Each condition was held until damage to the test article was observed or 55 minutes if no damage was incurred.

The data used to evaluate the candidate AFRSI configurations consisted of a comparison of the time to failure of the AFRSI panels from this test with the time to failure of previous successful AFRSI test panels. All objectives related to AFRSI rewaterproofing and to the use of films to stiffen the blanket fibers were achieved.

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INTRODUCTION

A sequence of environments test program was initiated in May 1982 to provide experimental data on the life of AFRSI material under expected environmental loadings. This program was designed to sequentially expose the AFRSI to wind/rain environments, aerodynamic and acoustic ascent loadings, and radiant thermal heating. This sequence simulates the loading environments encountered during each flight; on the launch pad, during lift-off, and during ascent and entry.

During the initial series of wind/rain, acoustic, and heating tests, the candidate rewaterproofing material for the AFRSI proved inadequate when subjected to entry temperatures above 1500°F. In addition, wind tunnel tests revealed that the blanket joints were easily distorted. As a result, films were being contemplated for use in stiffening the blanket ends to minimize gaps between the blankets due to ascent airloads. Some of these films were candidate rewaterproofing materials to be applied to the AFRSI.

Test OS-310 was developed in response to these findings and was conducted in the NASA/Ames Research Center 2x2-foot Transonic Wind Tunnel from November 10 through November 23, 1982. The purpose of this investigation was to evaluate two AFRSI rewaterproofing systems and to investigate films as a means of reducing blanket joint distortion. In addition, needle damage inflicted to the AFRSI during the sewing process was investigated to determine how it affected the life of the AFRSI material.

During earlier tests with the same test set-up, local flow perturbations and lack of uniformity were encountered. Oil flow visualization and pressure

INTRODUCTION (Concluded)

calibration tests were carried out in an attempt to eliminate the local flow perturbations and obtain a more two-dimensional flow field in the test section. Various separation wedge and tunnel wall slot configurations were tested at Mach numbers ranging from 0.65 to 0.82 and dynamic pressures of 138 to 1000 psf. A reasonable simulation of two-dimensional flow was achieved.

A total of 16 AFRSI specimens were tested: nine had blanket joints while the other seven were one-piece baseline configurations. Specimen testing was accomplished at a constant Mach number of 0.65 with dynamic pressures of 650 or 900 psf. Each condition was held until damage to the test article was observed or 55 minutes if no damage was incurred.

This report contains information on the conduct of the test, details of the model and instrumentation, a summary of the test schedule and conditions, plotted and tabulated pressure data, and photographs of the AFRSI specimens tested.

NOMENCLATURE

<u>SYMBOL</u>	<u>MNEMONIC</u>	<u>DEFINITION</u>
CONF		Test Configuration
C_p	CP	Pressure coefficient, data
HW		Wall position
IML		Inner Moldline
M	MACH	Freestream Mach number
OML		Outer Moldline
P_∞	P	Freestream static pressure, psia
P_l	PL	Local static pressure, psia
P_t	PT	Freestream total pressure, psia
q	Q	Freestream dynamic pressure, psf
Re	RE or RN	Freestream Reynolds number, per ft
T_s	TS	Freestream static temperature, °R
T_t	TT or T_{TF}	Freestream total temperature, °R or °F
V_∞	V	Freestream velocity, ft/sec
X	X	Longitudinal distance positive, inches aft of panel centerline
Y	Y	Lateral distance positive, inches right of panel centerline
ρ	RHO or RO	Freestream density, slugs/ft ³
PRMS	PRMS	RMS value of the variations from the mean value of the loca pressure, psi
WH		Wedge height, inches
WL		Wedge length, inches
WX		Wedge direction position, inches

REMARKS

During run numbers 10, 30, 40, 41, 42, 43, and 50, the tunnel data acquisition and Scanivalves showed some anomalies. Attempts to clear the problem were not successful. Since the oil flow test could be achieved without the pressure data, testing was resumed without any further delay. Computer and Scanivalve problems were solved after run 43.1.

During the initial pretest calibration, 22 Kulites were available of which three were found to be defective. These were Kulite numbers 17, 22, and 204. These Kulites were replaced with Kulite numbers 19 and 21. A total of 18 Kulites were used to obtain the fluctuating acoustic data during the calibration runs.

Data from a previous test (OS-301) in the ARC 2x2-foot TWT showed a lack of flow symmetry and regions of concentrated turbulence over the AFRSI test panels. In response to these conditions, visualization tests were conducted during Test OS-301 which showed a cross flow on the panels. This cross flow was apparently caused by air from the plenum chamber being drawn into the test section by the action of the low pressure field created by the presence of the separation wedge. For this reason, thorough oil flow and calibration runs were conducted during Test OS-310 and a satisfactory screening environment was achieved by mechanically backing all wall slots.

CONFIGURATIONS INVESTIGATED

The configurations used in this test did not duplicate any geometric surface of the Space Shuttle orbiter. A test article holding fixture, used during previous tests, was mounted in the tunnel's movable wall. The fixture, Model 115-0, was modified so that it would place the test articles in the center of the test section. During Test OS-310, the tunnel's movable wall was kept in the flush position (HW=0). The porosity of two of the tunnel surfaces was controllable. The other two had no provisions for any porosity. Four wedges were used to disturb the tunnel flow. All wedges had a 45-degree ramp to the flow. Three different wedge heights were used, 0.5, 1.0, and 1.5 inches. One wedge had a length of 23.6 inches, all the others were 20.75 inches long. The wedges were positioned at either $X = -11.9$ inches or $X = -16.4$ inches.

A dummy panel with grid marking was used during the oil flow portion of Test OS-310. Another dummy panel with instrumentation installed was used to calibrate the pressure distribution in the area of the test articles.

Sixteen test articles were used during this test. Each had an exposed surface of 15.5 x 12.5 inches and was mounted flush to the tunnel wall in the holding fixture. A description of each panel is presented in Table III.

INSTRUMENTATION

Data for Test OS-310 consisted of time averaged and fluctuating pressure measurements. The 32 static pressure orifices in the fixture were used during the entire test. Fifteen additional orifices were used with the calibration panel.

Twelve Kulite transducers in the fixture were also used during the entire test. The calibration panel contained 22 additional Kulite transducers.

The locations of all this instrumentation are shown in Figure 1.

TEST FACILITY

The ARC 2x2-foot wind tunnel was used for these tests. The tunnel is of the continuous flow type with variable porosity test section walls surrounded by a plenum chamber. Mach number is continuously variable over the range from 0.6 to 1.4 and dynamic pressure is continuously variable over the range from 200 to 1500 psf.

The tunnel can be operated so that one section of the side wall moves up to 1.4 inches into the airstream. The upstream edge of the movable wall is a sharp edged splitter plate which scoops off all or part of the tunnel sidewall boundary layer. It is possible to position the wall to achieve a boundary layer thickness from 0.25 to 1.0-inch in the panel test region.

TEST PROCEDURE

The test was conducted in three parts. First, a study was made, using oil, to define the surface flow pattern. The tunnel's wall porosity, Mach, and dynamic pressure were varied. The flow separator wedge height, length, and X-station were also varied.

After a usable flow field was found, an instrumented calibration panel was installed in the tunnel. The time-averaged pressures and the acoustic pressures were recorded for various tunnel and wedge conditions. When the proper environments had been defined, the test articles were inserted into the fixture and run. A detailed run schedule is presented in Table II.

DATA REDUCTION

Standard tunnel equations were used to compute all tunnel conditions.

The time-averaged pressure data was recorded and reduced to standard coefficient form by the facility using:

$$C_p = (P_l - P_\infty) \times 144/q$$

Plots of this data are presented in Figures 4 through 8. This data is tabulated in Appendix A.

Fluctuating acoustic pressure data was recorded on magnetic tape, then played back so that the Vibration and Acoustics group could analyze the data. The data was converted to dB's using:

$$dB = 10 \log_{10} \left(\frac{P_{RMS} \times 10^9}{2.9007} \right)^2$$

Representative data are presented in Figures 9 and 10.

REFERENCES

1. STS82-0762, "Pretest Information for AFRSI Rewaterproofing Screening Test OS-310 in the Ames Research Center (ARC) 2x2-foot Transonic Wind Tunnel" (October 1982)
2. V&A-280-301-83-021, "Wind Tunnel Environments Obtained for AFRSI Rewaterproofing Screening Test OS-310 Conducted in the ARC 2x2-foot Transonic Wind Tunnel" (March 22, 1983)

TABLE I

TEST CONDITIONS

Number	Reynolds Number (Per Ft x 10 ⁻⁶)	Dynamic Pressure PSF	Stagnation Temperature Deg F
0.3	2.17	140	80
0.4	2.67	225	80
0.5	3.15	325	80
0.6	3.53	425	80
0.6	4.77	575	80
0.6	6.02	725	80
0.6	7.05	850	80
0.6	8.30	1000	80
0.65	3.73	480	80
0.65	5.05	650	80
0.65	6.22	800	80
0.65	7.00	900	80
0.65	7.77	1000	80
0.7	3.96	540	80
0.7	5.13	700	80
0.7	5.87	800	80
0.7	6.60	900	80
0.75	4.18	600	80
0.75	4.52	650	80
0.75	5.40	775	80
0.75	6.96	1000	80
0.8	4.25	640	80
0.85	4.20	660	80
0.85	6.37	1000	80

TABLE II

Project 560-1-22

AMES 2x2

DATE:

DATA SET/RUN NUMBER COLLATION SUMMARY

date	run no.	CONFIGURATION	WH	Mach	"Hg		PSF	temp	wedge ~ in.		remarks	
					Pt	Ps			WHT	WL T WX		
	10	OIL FLOW	0	.814	47M	19.34	-	88.0	Y	23.6	-16.4	#
	30	OIL FLOW	0	.744	29.92	20.63	-	103	Y	23.6	-16.4	#
	40-6	OIL FLOW + KULITES	0	.750	30.15	20.77	572.7	85.0	Y	23.6	-16.4	Porosity bars closed. No tape in tunnel.
	41-2		0	.752	34.70	23.85	617.6	113.8	Y	23.6	-16.4	
	42		0	.818	30.08	19.39	-	95.2	Y	23.6	-16.4	
	43-3		0	.826	30.21	19.32	65.9	105.8	Y	23.6	-16.4	
	50 } 52-3	Y	0	.757	35.25	24.10	684.5	110.5	Y	23.6	-16.4	Porosity bars open ≈ 0.025" (no tape)
	54-3	OIL FLOW + KULITES	0	.714	30.33	20.32	132.4	70.9	Y	20.8	-16.4	
	55-1	MACH SWEEP	0	.409	30.33	29.03	223.4	70.7	Y	20.8	-16.4	
	56-1		0	.508	30.35	25.43	244.8	71.9	Y	20.8	-16.4	
	57-1		0	.605	30.37	23.73	230.1	75.1	Y	20.8	-16.4	Porosity bars closed.
	58-1		0	.705	30.34	21.80	535.8	77.6	Y	20.8	-16.4	
	59-1		0	.794	30.36	20.95	606.8	96.7	Y	20.8	-16.4	
	60-1		0	.708	30.95	26.69	709.5	90.4	Y	20.8	-16.4	
	61-62-1	Y	0	.704	50.08	35.93	822.3	94.3	Y	20.6	-16.4	Y

TEST RUN NUMBERS

7 13 19 25 31 37 43 49 55 61 67 75 76

IMW = Wall Height
 WHT = y = 1.5" flow separator
 x = 1.0" flow separator
 z = 0.5" flow separator

* Tunnel Floor & Ceiling Tape 50% Span
 ** Tunnel Tape 50% Span Top and Bottom
 Plus Porosity Bars Top and Bottom Closed.

TEST: OS-310

AMES 2x2

Project 560-1-22

DATE:

DATA SET/RUN NUMBER COLLATION SUMMARY

date	run no.	CONFIGURATION	WHI	Mach	°Hg		PSF	temp		wedge in.		remarks		
					Pt	P _s		Q	I	J	F		WHT	WLT
	64-6	OIL FLOW + KULITES	0	.606	30.02	23.42	135.9	60.3			Y	23.6	-16.4	Porosity bars closed.
	65-1		0	.607	30.30	23.50	135.6	65.7			Y	23.6	-16.4	
	66-1		0	.611	30.56	23.28	137.1	70.9			Y	23.6	-16.4	
	68-1		0	.604	30.64	23.40	135.5	77.3			Y	23.6	-16.4	
	69-1		0	.605	30.35	23.95	139.7	82.7			Y	23.6	-16.4	
	70-2		0	.657	30.05	23.47	138.2	69.9			Y	23.6	-16.4	
	71-1		0	.653	30.67	23.55	145.3	75.4			Y	23.6	-16.4	
	72-1		0	.654	30.50	23.70	142.0	81.3			Y	23.6	-16.4	
	73-1	Y	0	.651	33.31	27.60	190.1	85.3			Y	23.6	-16.4	
	78-2	CALIBRATION PANEL	0	.651	30.09	23.62	137.3	64.9			Y	23.6	-16.4	
	79-1		0	.658	30.00	23.67	140.8	68.4			Y	23.6	-16.4	
	80-1		0	.652	30.04	23.61	139.6	76.5			Y	23.6	-16.4	
	81-1		0	.651	32.97	27.36	173.8	81.5			Y	23.6	-16.4	
	82-1	Y	0	.653	32.95	27.50	172.3	83.0			Y	23.6	-16.4	

TEST RUN NUMBERS

7 13 19 25 31 37 43 49 55 61 67 73 76

WHI = Wall Height
 WHT = y = 1.5" flow separator
 x = 1.0" flow separator
 z = 0.5" flow separator

Project 560-1-22

AMES 2x2

TEST: OS-310		DATA SET/RUN NUMBER COLLATION SUMMARY												DATE:	
date	RUN NO.	CONFIGURATION	hw	sw	Blact	Hg		PSF	temp	time	wedge ~ in.		remarks		
						Pt	P _s				WHT	WLT		WX	
	83-1	CALIBRATION PANEL	0		235	30.03	19.20	647.2	79.7		X	20.8	-16.4	Tunnel blockage	
	84-1		0		750	30.06	20.71	576.0	78.4		X	20.8	-16.4	dropped 0.1 of a Mach	
	85-2		0		752	40.0	23.56	771.4	82.6		X	20.8	-16.4	Porosity bars closed.	
	86-2		0		750	53.50	36.46	1008	87.8		X	20.8	-16.4		
	87-3		0		849	28.99	17.30	146.7	78.7		Z	20.8	-16.4		
	88-2		0		851	49.94	27.97	1003	85.9		Z	20.8	-16.4		
	89-1		0		848	45.21	28.25	1004	89.4		Z	20.8	-16.4	Y	
	100-10	TEST PANEL #2	0		652	46.32	31.05	633.7	86.4	55	Y	23.6	-16.4	(control panel)	
	101	#2	0		652	43.85	42.12	950	86.5	9	Y	23.6	-16.4	Porosity bars closed	
	102-18	#1	0		652	57.22	42.13	901.8	87.8	2.1	Y	23.6	-16.4		
	103-6	#1-C	0		650	57.21	43.11	901.3	88.7	9	Y	23.6	-16.4		
	104-5	#11	0		653	57.07	42.88	704.5	82.8	2	Y	23.6	-16.4		
	105-1	#12	0		651	57.19	43.02	902.1	84.8	2	Y	23.6	-16.4		
	106*	#1-C	0		645	51.33	45.0	900	76.4	3	Y	23.6	-16.4		
	107-1	#13	0		652	57.33	43.00	902.1	87.2	5	Y	23.6	-16.4	Y	

* Run 106, 3 min. from air on to shutdown. Not on condition. Panel #1-C was repaired and coated.

HW = Wall Height
WHT = y = 1.5" flow separator

x = 1.0" flow separator

z = 0.5" flow separator

Note: Time-cumulative minutes on-condition.

TEST RUN NUMBERS

61 67 73 76

Project 560-1-22

AMES 2x2

TEST: OS-310

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE:

date	run no.	CONFIGURATION	hw	SW	"Hg		PSF	temp	time	wedge ~ in.		remarks	
					P _t	P _s				WHT	WLT		
	108-4	TEST PANEL #2-C	0		654	57.5	42.87	900.9	90.5	8	Y	23.6 -16.4	Porosity bars closed
	109-17	#8	0		650	35.6	31.09	690.5	87.2	37	Y	23.6 -16.4	
	110-4	#14	0		652	52.09	42.89	903.5	83.8	10	Y	23.6 -16.4	
	111-3	#16	0		654	57.35	42.96	909	84.0	5.5	Y	23.6 -16.4	
	112-12	#2-C	0		650	57.16	43.02	901	94.9	28	Y	23.6 -16.4	
	113-10	#15	0		651	57.14	43.0	902.7	94.9	21.5	Y	23.6 -16.4	
	114-7	#3	0		651	41.27	31.04	651.4	85.2	14	Y	23.6 -16.4	
	115-6	#4	0		652	41.27	31.02	653.4	80.3	56	Y	23.6 -16.4	
	116-2	#5	0		652	41.35	31.07	654.4	78.0	26	Y	23.6 -16.4	
	117-2	#6	0		651	41.37	31.11	653	70.2	14	Y	23.6 -16.4	
	118-2	#7	0		654	41.95	31.09	658.7	71.0	10.5	Y	23.6 -16.4	

TEST RUN NUMBERS

7 13 19 25 31 37 43 49 55 61 67 73 76

HW = Wall Height
WHT = y = 1.5" flow separator
x = 1.0" flow separator
z = 0.5" flow separator

TABLE III

<u>Date</u>	<u>I/A</u>	<u>Needle Damage</u>	<u>Joint</u>	<u>Rewater-proofing</u>	<u>Thermal # of Cycles</u>	<u>Test Condition</u>	<u>Time Min. On-condition</u>	<u>Notes</u>
11-16-82	2	Not per spec Moderate	Yes	No	No	M=0.65 Q=650 psf	55	Some thread failure
11-17-82	2	Not per spec Moderate	Yes	No	No	M=0.65 Q=950 psf	9	Fabric frays along stitch-line almost to failure (fwd and aft areas)
11-17-82	1	Not per spec Moderate	No	No	No	M=0.65 Q=905 psf	21	Fabric failure (aft corner)
11-17-82	1-C	Minimal	No	No	No	M=0.65 Q=901 psf	9	Pre-mature shutdown due to fabric frays along I.E. Fabric at I.E. pulling out from frame. Will coat damage areas, then put back into tunnel.
11-17-82	11	Not per spec Moderate	Yes	Z6079 + Acrylic Film	400; 1500 (1)	M=0.652 Q=902 psf	2	Fabric/thread failure (fwd center)
11-17-82	12	Yes	Yes	Z6079 + Acrylic Film	600; 1500 (1)	M=0.651 Q=902 psf	2	Fabric failure along stitch-line (total aft end)
11-18-82	1-C	Minimal	No	No	No	M=0.645 Q=900 psf	0	Damaged area from previous run, failed before obtainin g tunnel conditions. 3 min. from air on to shutdown.

TABLE III (Continued)

Date	I/A	Needle Damage	Joint	Rewater-proofing	Thermal # of Cycles	Test Condition	Time Min. On-condition	Notes
11-18-82	13	Minimal	No	Z6079 + Acrylic Film	800; 1500 (5)	M=0.650 Q=900 psf	5	Pad puffed significantly prior to failure, due to major thread damage. (Total aft end)
11-18-82	2-C	Minimal	Yes	No	No	M=0.655 Q=910 psf	8	Shutdown prematurely due to fabric fray. Will coat damage area, then retest.
11-18-82	8	Not to spec Moderate	Yes	Z6079 + Acrylic Film	800; 1500 (5)	M=0.652 Q=655 psf	37	Failure initiation adjacent to stitch row significance puffing prior to failure. Pad had W/P exposure. (forward center)
11-19-82	14	Minimal	No	Z6079 + Acrylic Film	1000; 1500 (9)	M=0.650 Q=900 psf	10	Major thread breakage; puffing of pad prior to failure, fabric pulled out from TE frame contributing to failure.
11-19-82	16	Broken yarns Sidewall Minimal	Yes	No	No	M=0.650 Q=900 psf	5.5	Fabric failure did not occur on sidewall. Sidewall looks good. Failure occurred adjacent to stitchline. (Mid edge)
11-19-82	2-C	Slight	Yes	No	No	M=0.650 Q=901 psf	28	Fabric failure did not occur on sidewall. (Aft side & edge)
11-19-82	15	Moderate	Yes	No	No	M=0.654 Q=902 psf	22	Fabric failure adjacent to stitchline. (Aft center)

TABLE III (Concluded)

Date	T/A	Needle Damage	Joint	Rewater-proofing	Thermal # of Cycles	Test Condition	Time Min. On-condition	No. 5
11-19-82	3	Yes	Yes	No	200; 1500 (1)	M=0.653 Q=652 psf	14	Thread breakage caused failure. (Aft center)
11-22-82	4	Yes	Yes	Silane Z6079	400; 1500 (1)	M=0.653 Q=654 psf	56	No mileage. Thread breakage and slight puffing.
11-22-82	5	Yes	Yes	Silane Z6079	600; 1500 (1)	M=0.654 Q=654 psf	26	Thread failure caused blanket failure. Significant puffing prior to failure. (Aft center)
11-22-82	6	Not per spec Moderate	No	Silane Z6079	800; 1500 (5)	M=0.651 Q=653 psf	14	Thread breakage caused failure. I.E. Fabric on verge of pulling out from frame. (Aft corner)
11-23-82	7	Per spec. Minimal	No	Silane Z6079	1000; 1500 (7)	M=0.650 Q=653 psf	10.5	Thread breakage caused failure. (Trailing edge)

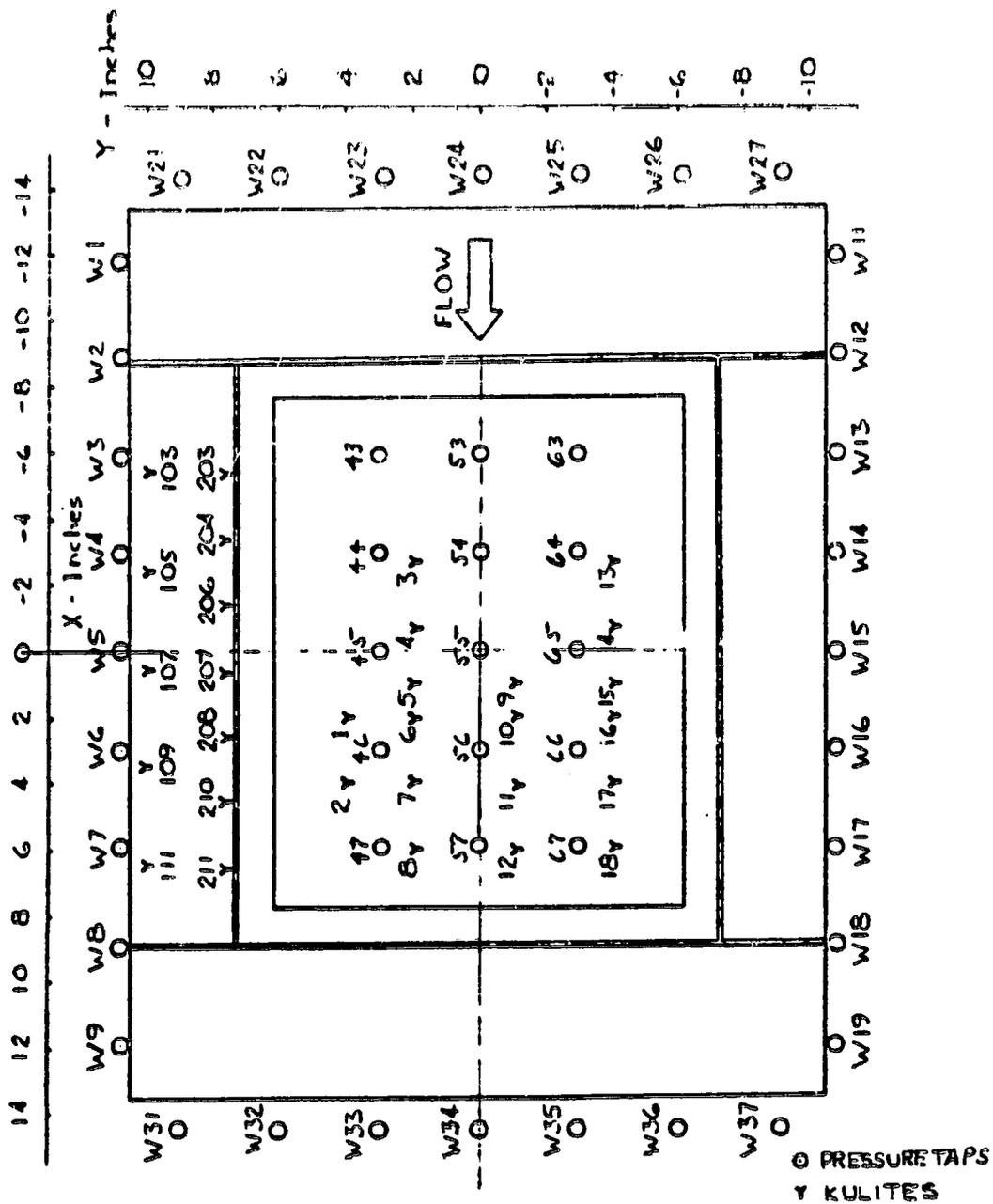


Figure 1. INSTRUMENTATION LOCATION

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Figure 2.a Run 10 $M = 0.81$ $P_T = 29.92$ in. Hg $q = 633$ psf
Tunnel floor and ceiling taped 50% span.
 $W_H = 1.5$ $W_L = 23.6$ $W_X = 16.4$



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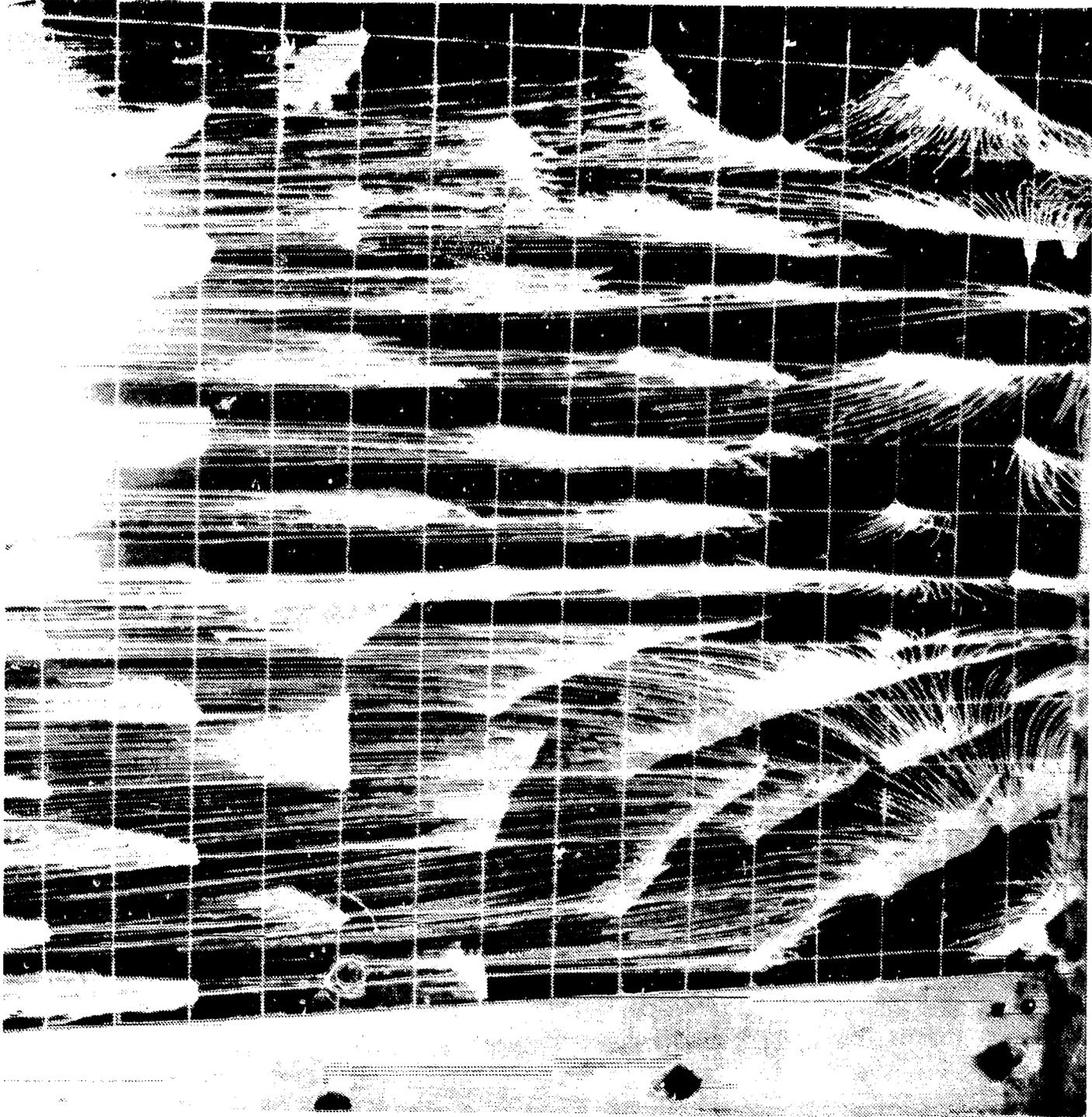


Figure 2.b

Run 30 $M=0.74$ $P_T=29.99$ $q=568$

Tunnel taped 50% span top and bottom;
porosity bars closed top and bottom.

$W_I=1.5$ $W_L=23.6$ $W_X=16.4$



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Figure 2.c

Run 41 M=0.75 P_T=34.63 q=115

Porosity bars closed top and bottom.

WI=1.5 WL=23.6 WX=-16.4

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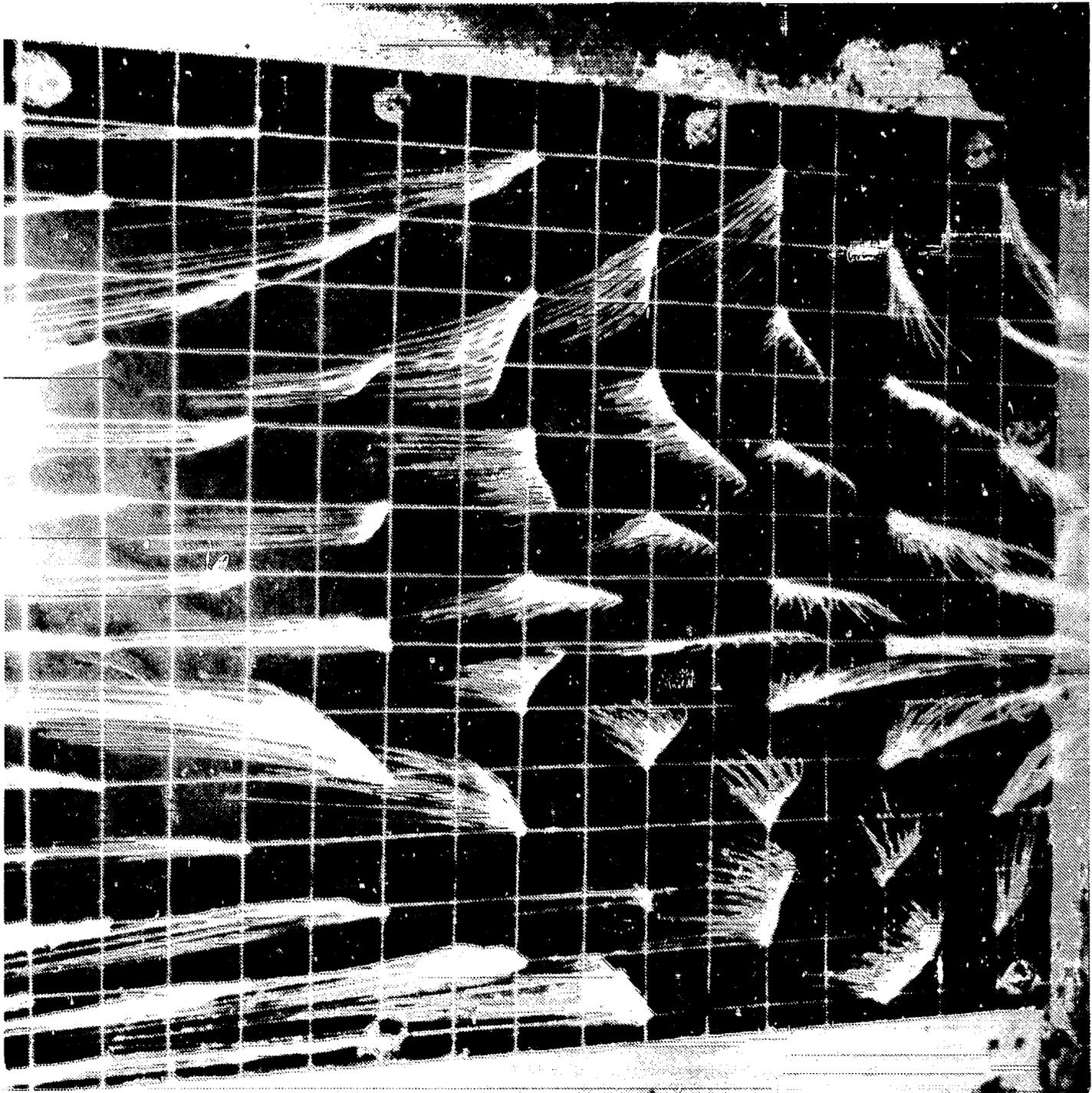


Figure 2.d Run 43 M=0.83 $P_T=34.97$ $q=106$
Porosity bars open 0.025 inch top and bottom.
WI=1.5 WL=23.C WX=-16.4

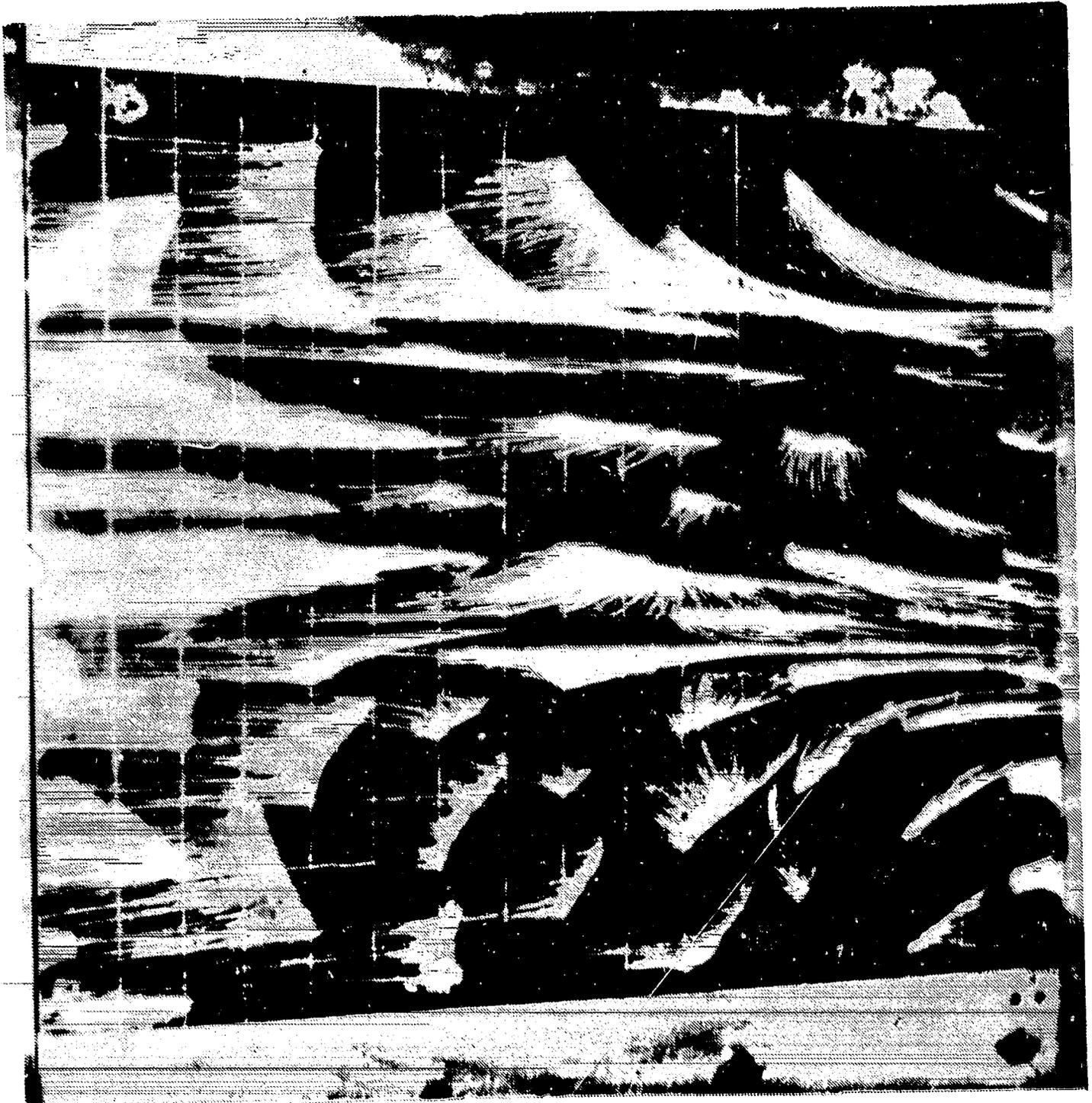
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 OF POOR QUALITY


Figure 2.c Run 51 M=0.75 P_T=29.8 q=1000
 Run 52 M=0.75 P_T=35.3 q=1010

After Runs 51 and 52, porosity bars closed
 top and bottom.

WI=1.5 WL=23.6 WX=-11.9

ORIGINAL FIGURE
OF POOR QUALITY

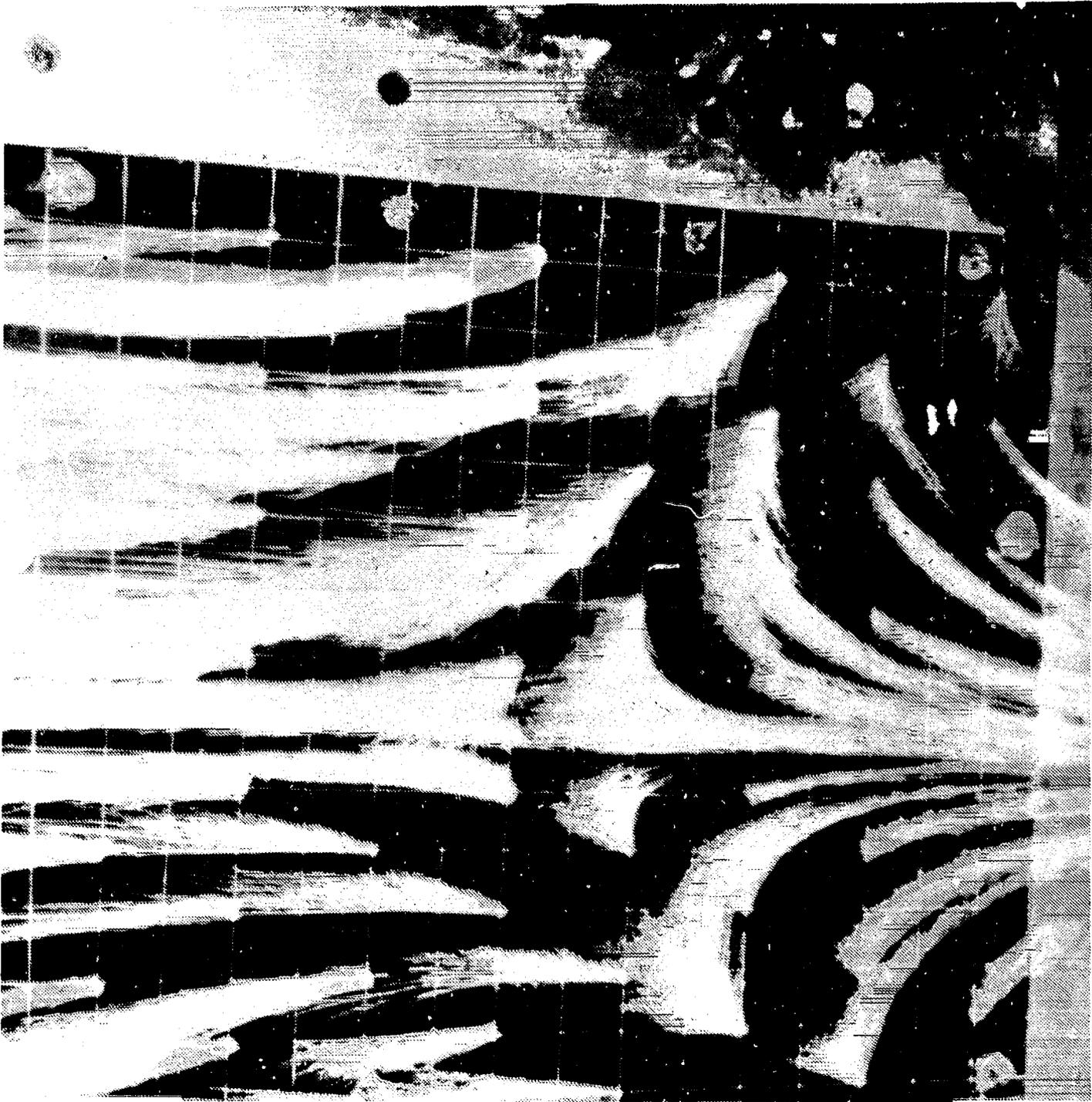


Figure 2.f Runs 54 → 62 M=0.30 → 0.77 P_T=30 → 44 q=140 → 880
Porosity bars closed top and bottom.
WH=1.5 WL=20.8 WX=-16.4



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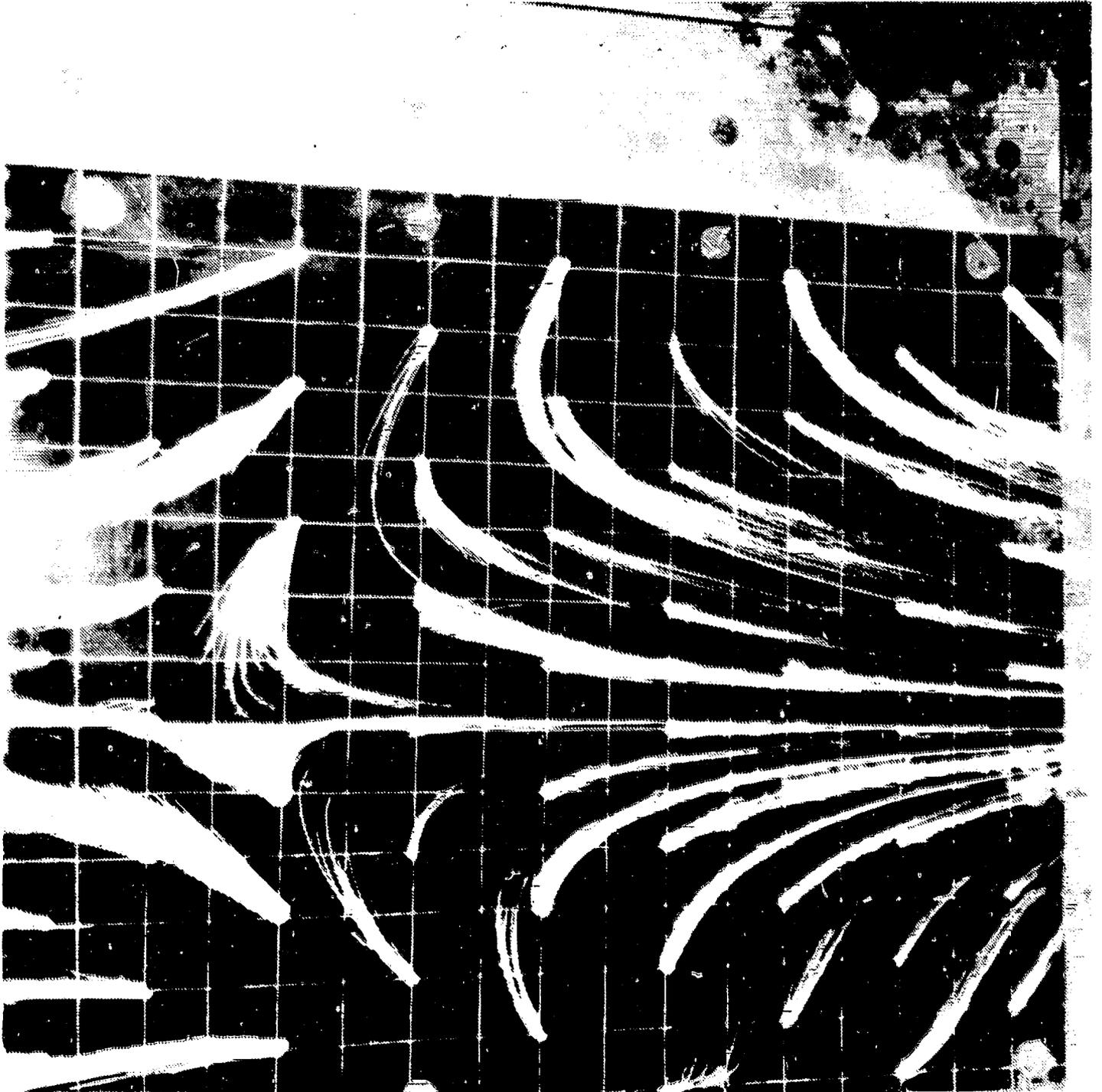


Figure 2.g Runs 64 → 69 $M=0.6$ $P_T=30 \rightarrow 70$ $q=425 \rightarrow 1000$
(No Run 67)

Porosity bars closed top and bottom.

WH=1.5 WL=23.6 WX=-16.4

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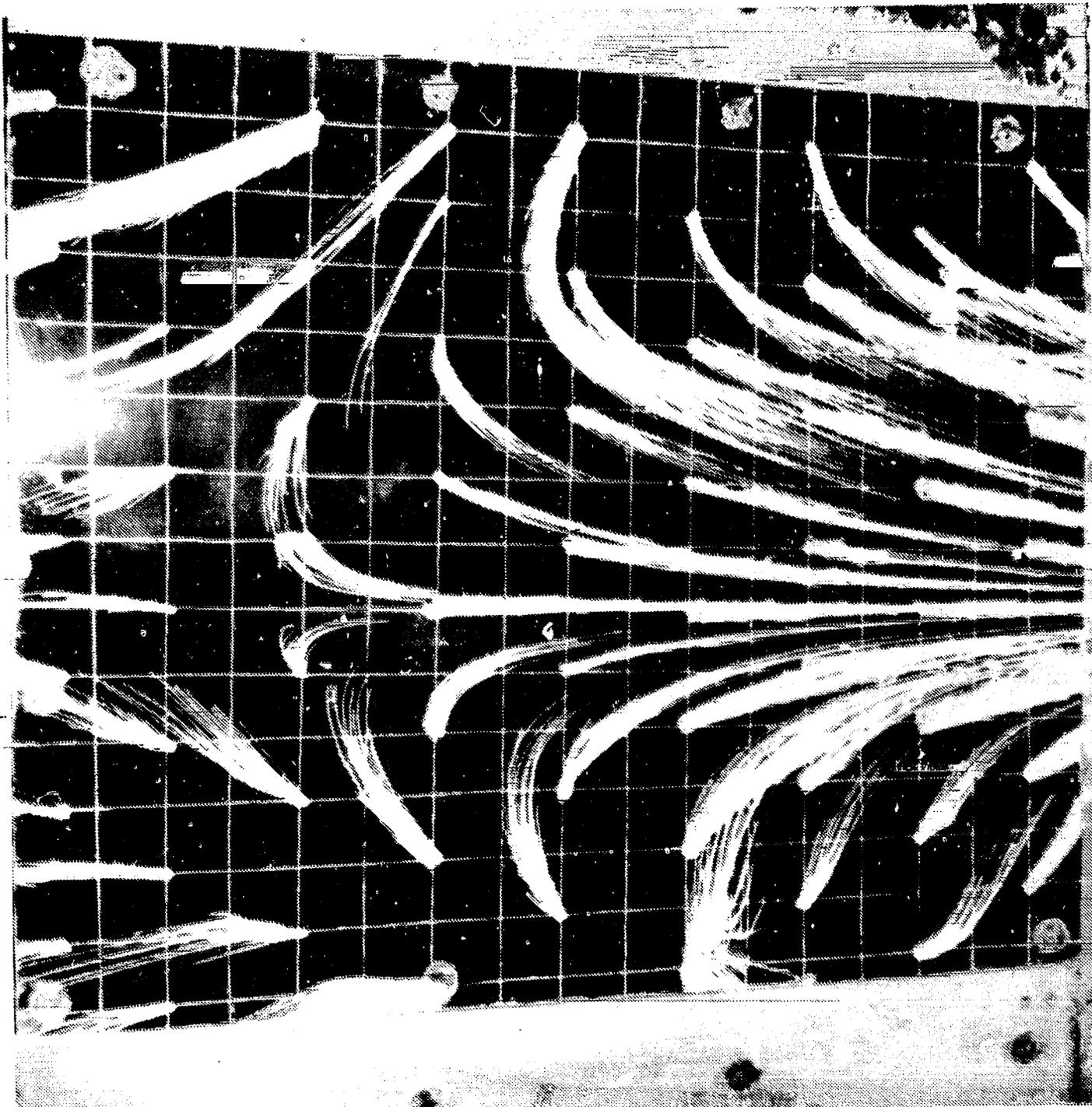
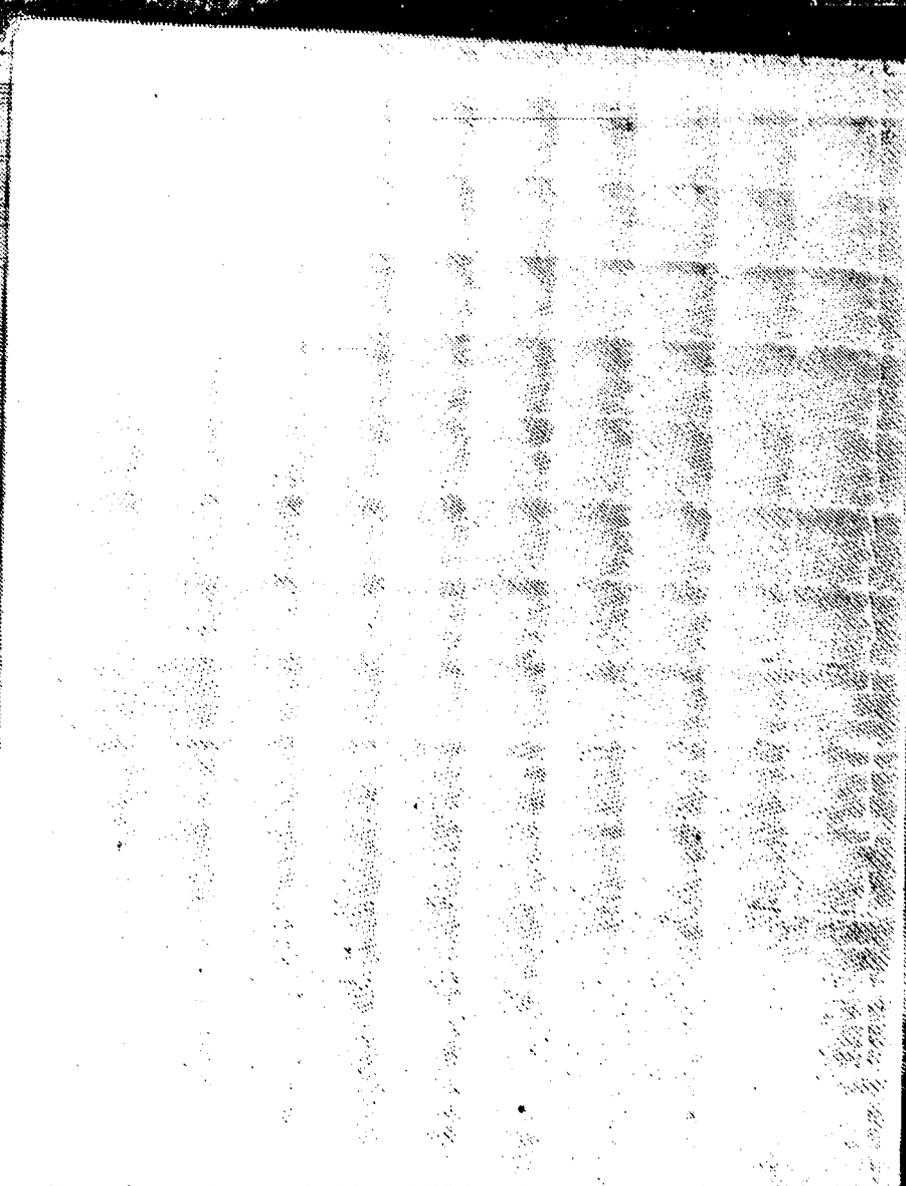


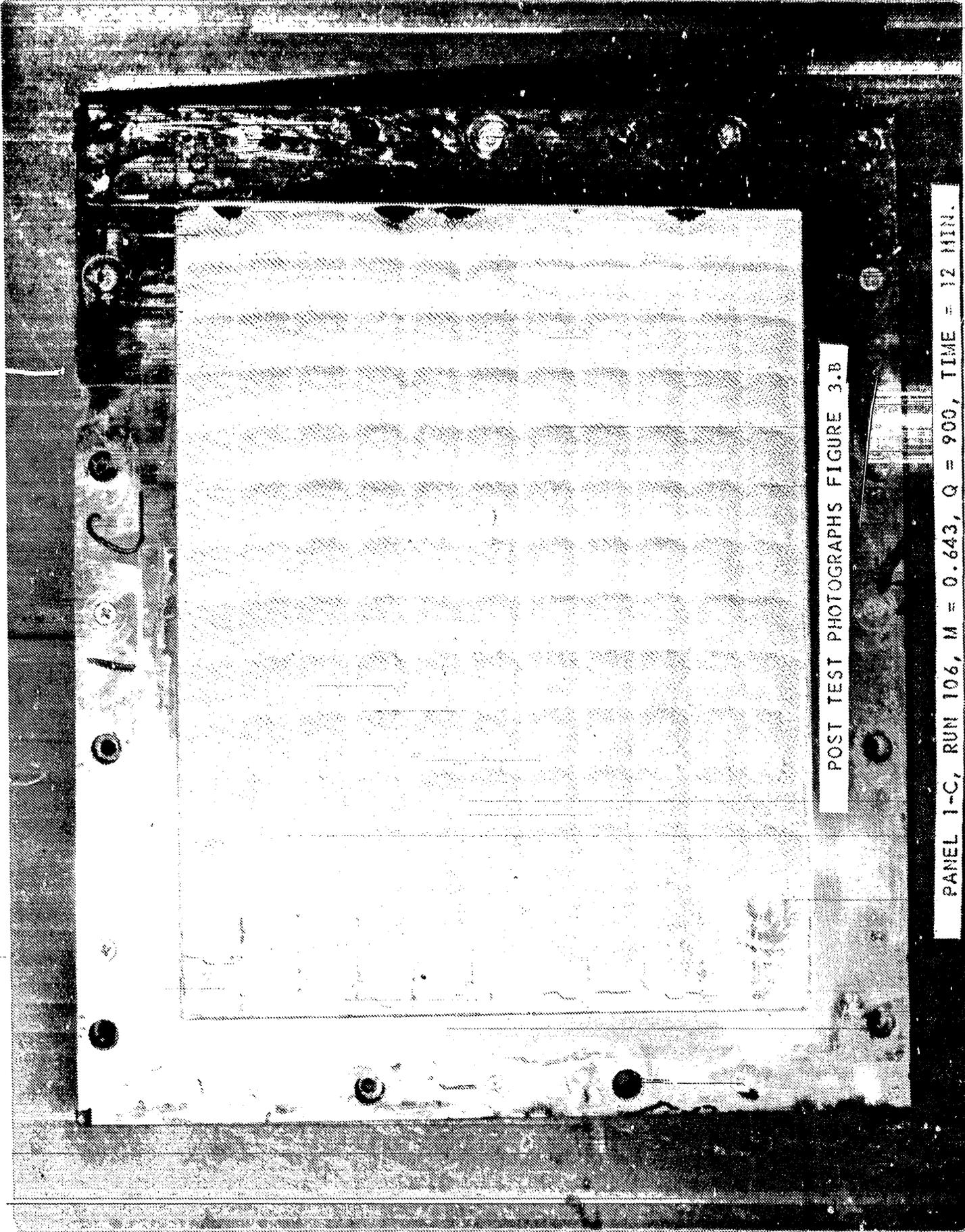
Figure 2.h Run 70 → 73 M=0.65 P_T=30 → 63 q=480 1000
Porosity bars closed top and bottom.
WH=1.5 WL=23.6 WX=-16.4



POST-TEST PHOTOGRAPHS FIGURE 3.A

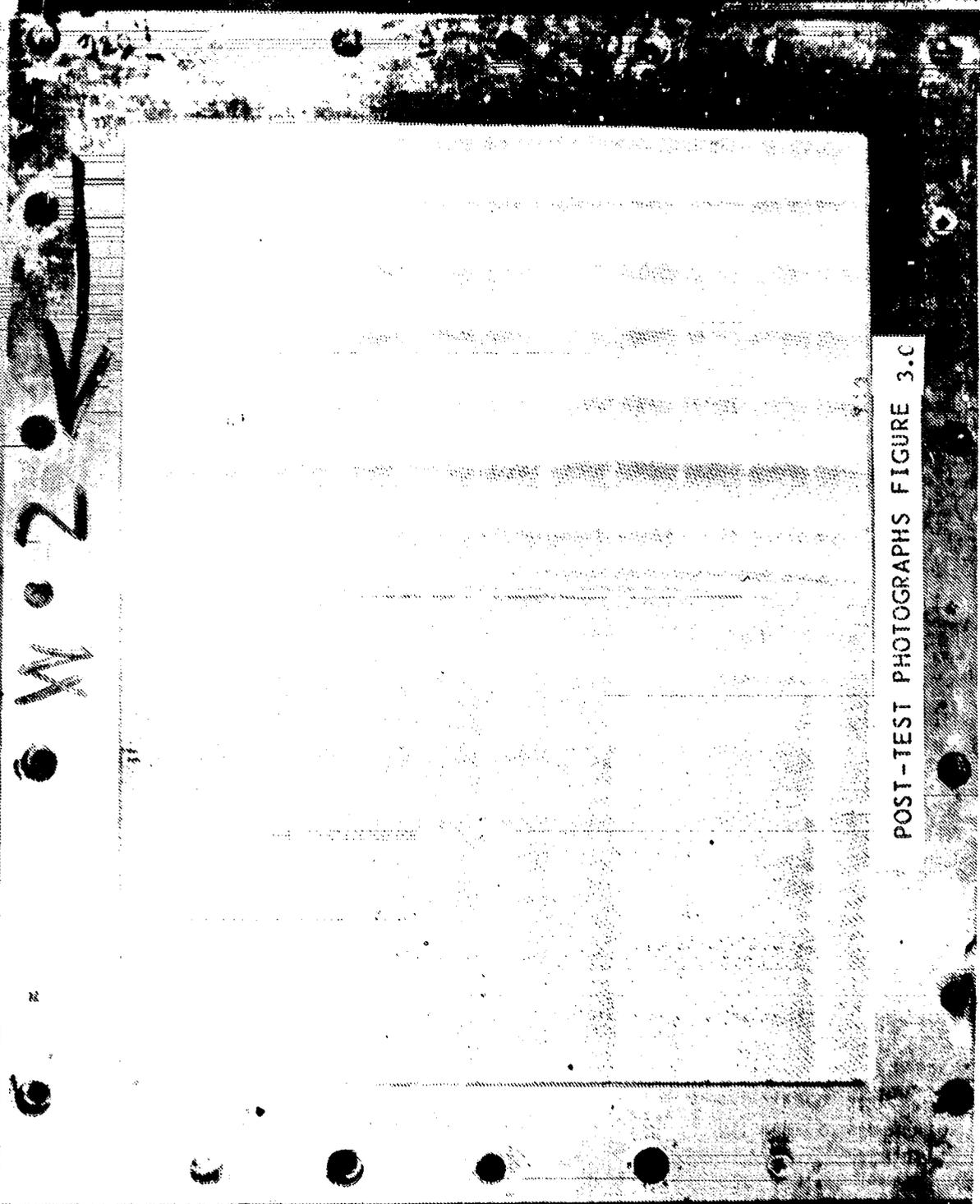
PANEL 1, RUN 102, M = 0.652, Q = 905, TIME = 21 MIN.

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OF POOR QUALITY



POST TEST PHOTOGRAPHS FIGURE 3.B

PANEL 1-C, RUN 106, M = 0.643, Q = 900, TIME = 12 MIN.



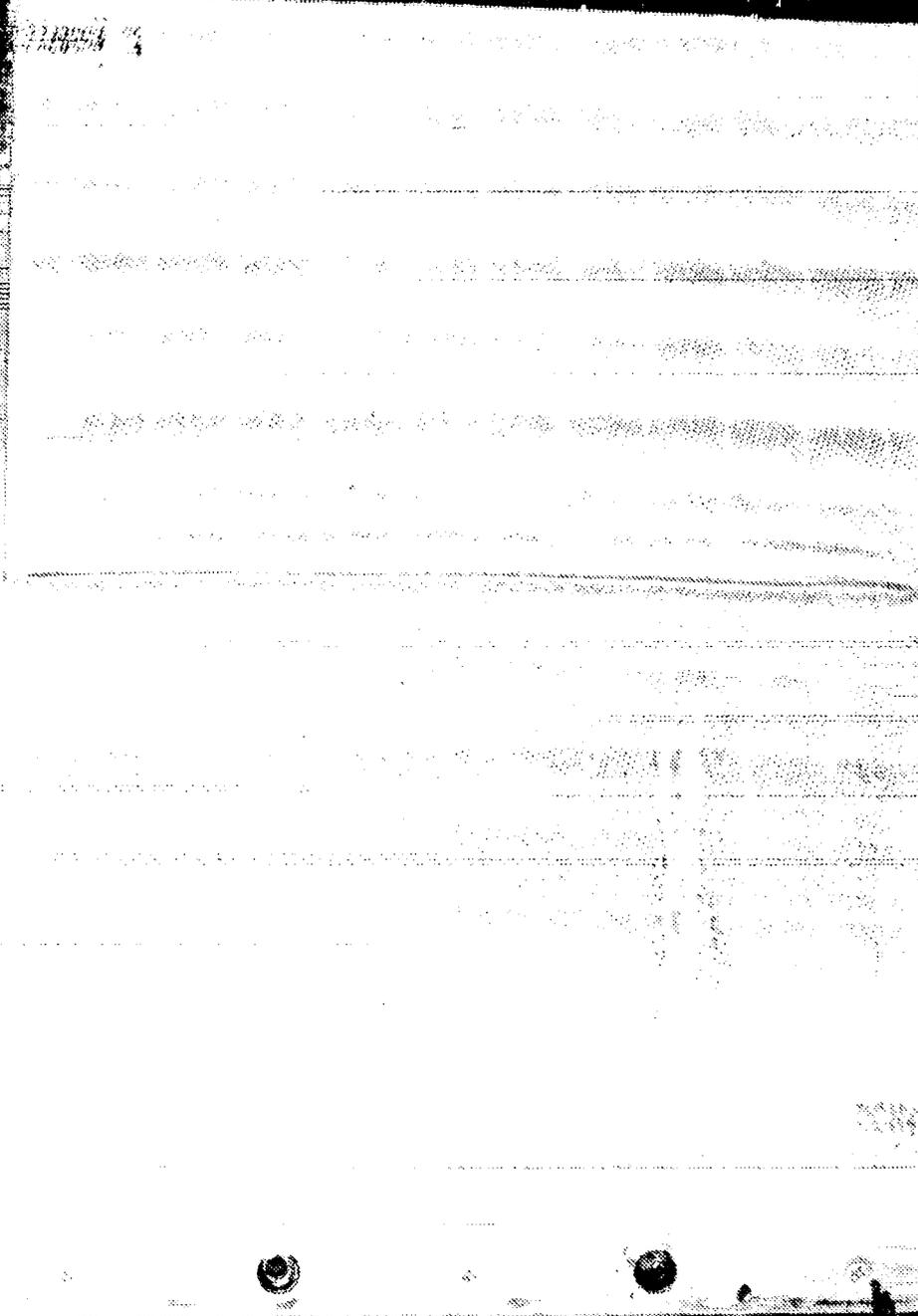
W. 2.



POST-TEST PHOTOGRAPHS FIGURE 3.0

PANEL 2, RUN 100 AND 101, M = 0.651, Q = 650 AND 900, TIME 55 AND 9 MIN.

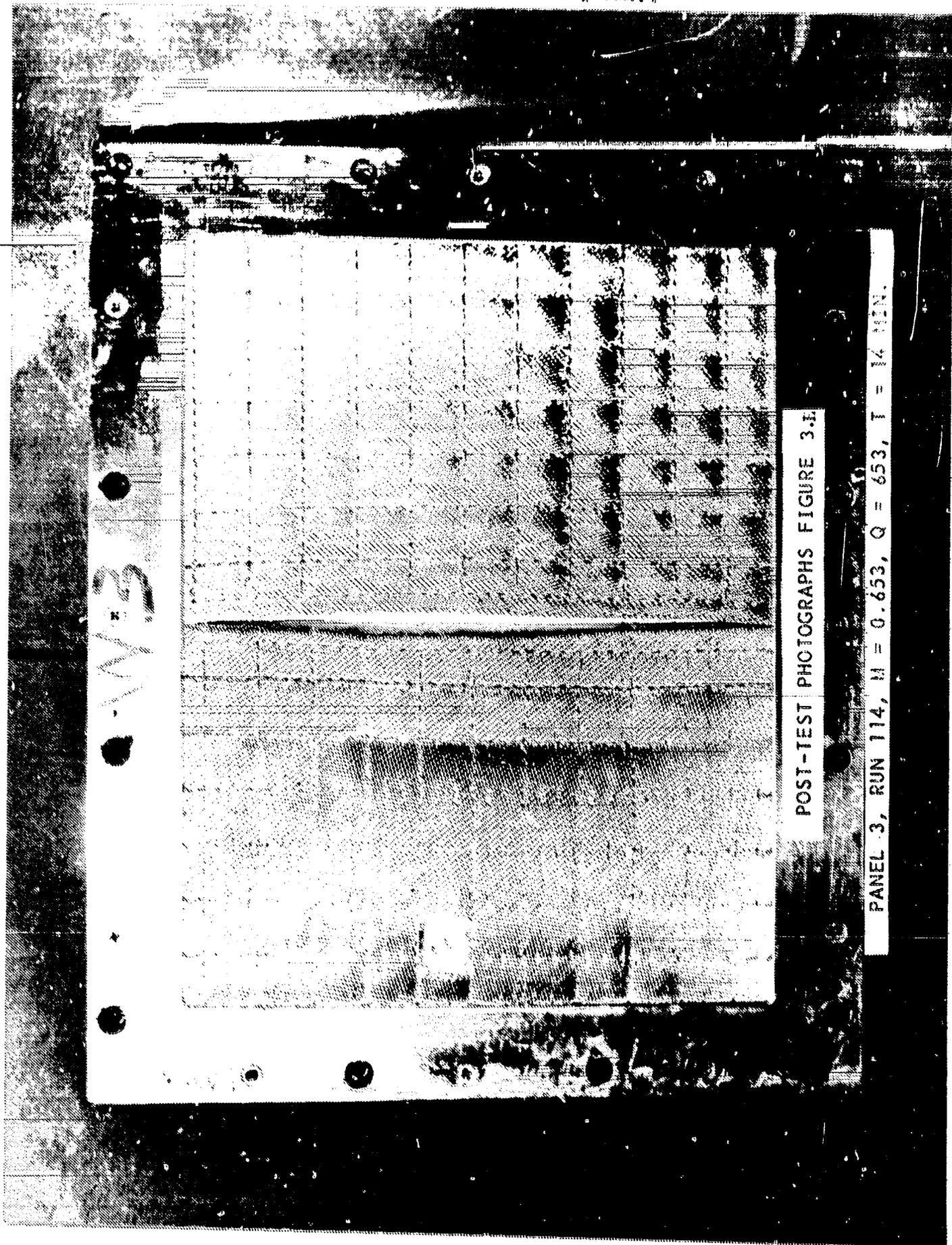
● 4 ● 26 ●



POST-TEST PHOTOGRAPHS FIGURE 3.D

PANEL 2-C RUN 112, M = 0.650, Q = 901, T = 28 MIN.

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MS

POST-TEST PHOTOGRAPHS FIGURE 3.1

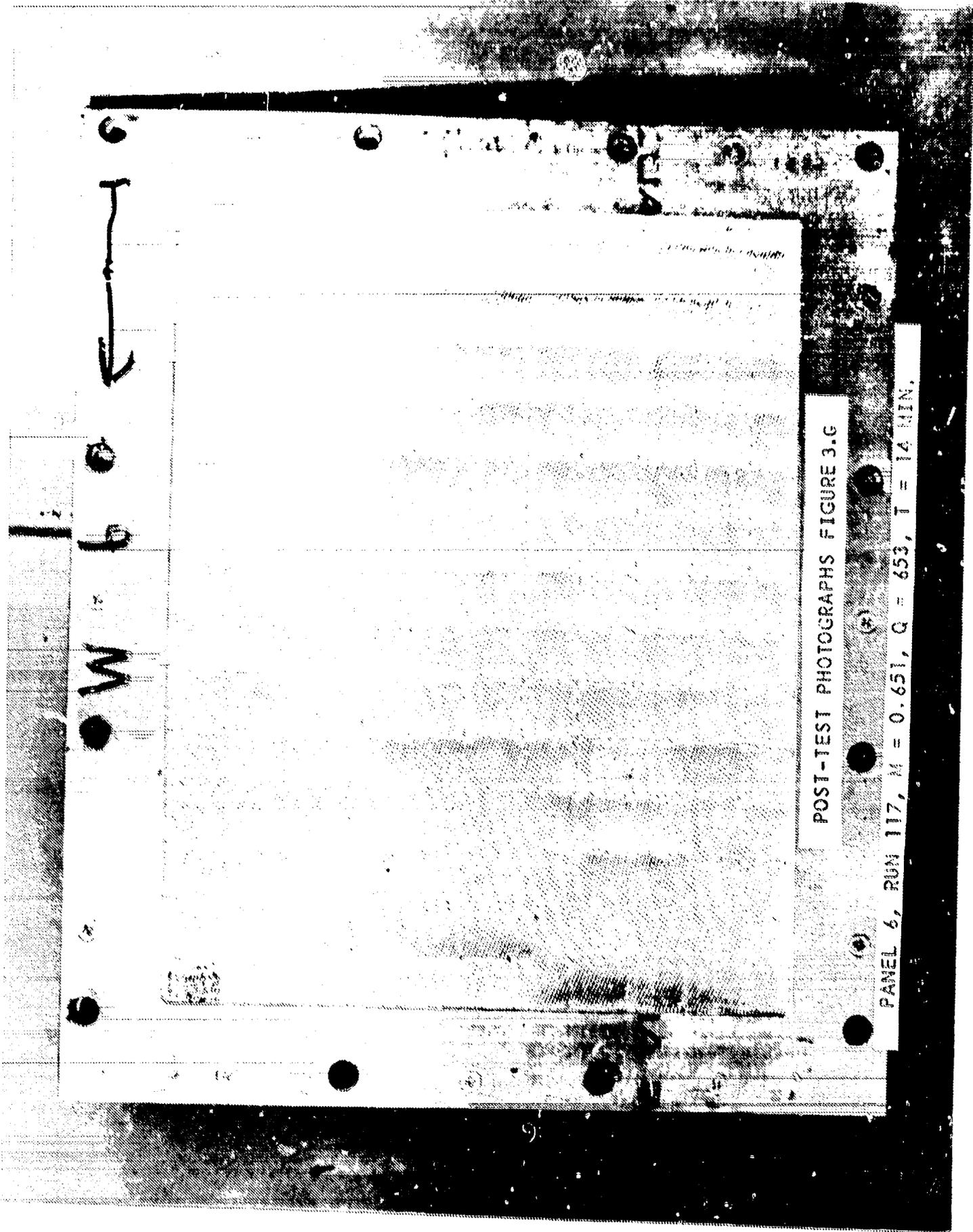
PANEL 3, RUN 114, M = 0.653, Q = 653, T = 14 MIN.

W 4

POST-TEST PHOTOGRAPHS FIGURE 3.1

PANEL 4, RUN 115, M = 0.653, Q = 654, T = 56 MI.

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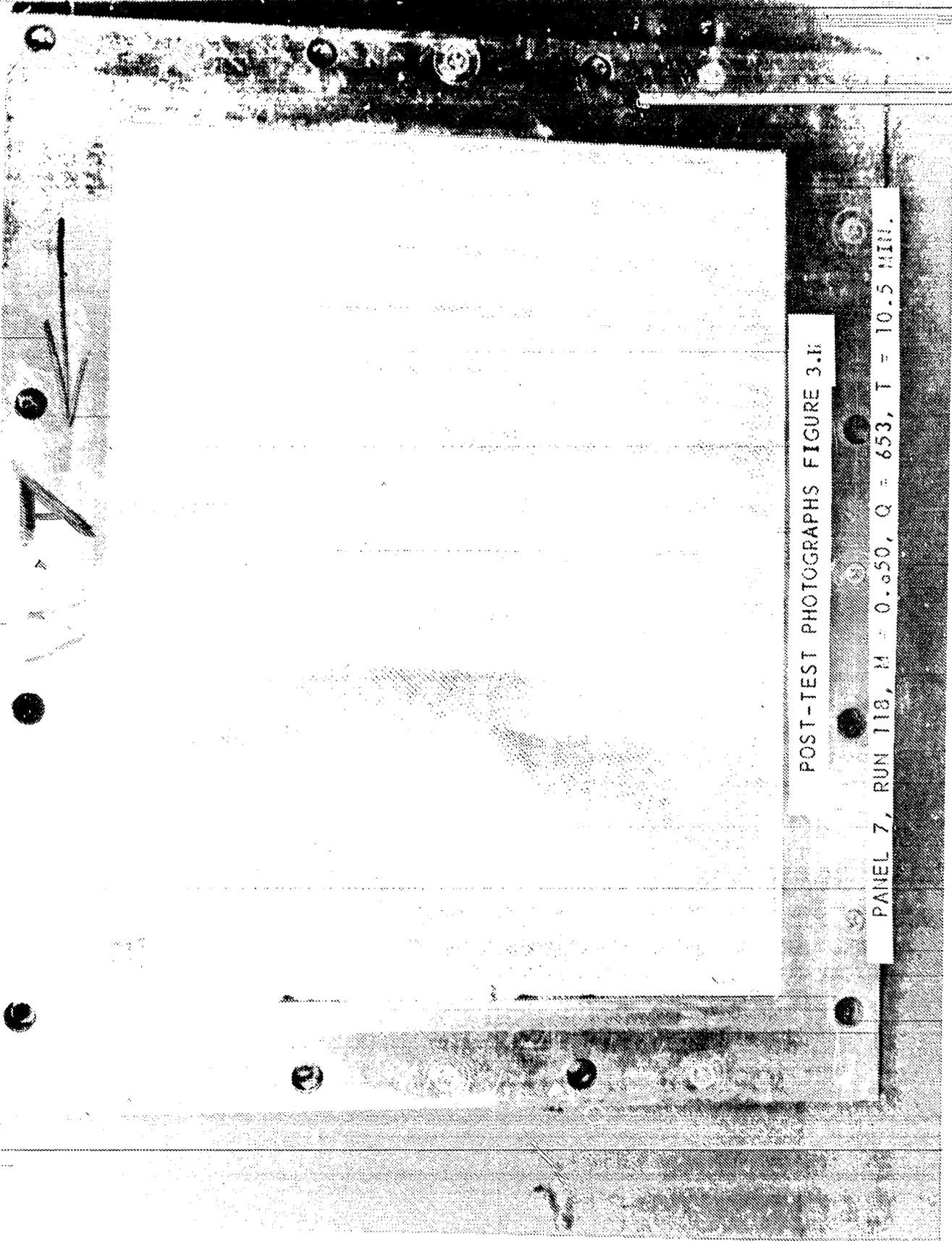
W



POST-TEST PHOTOGRAPHS FIGURE 3.G

PANEL 6, RUN 117, M = 0.651, Q = 653, T = 14 MIN.

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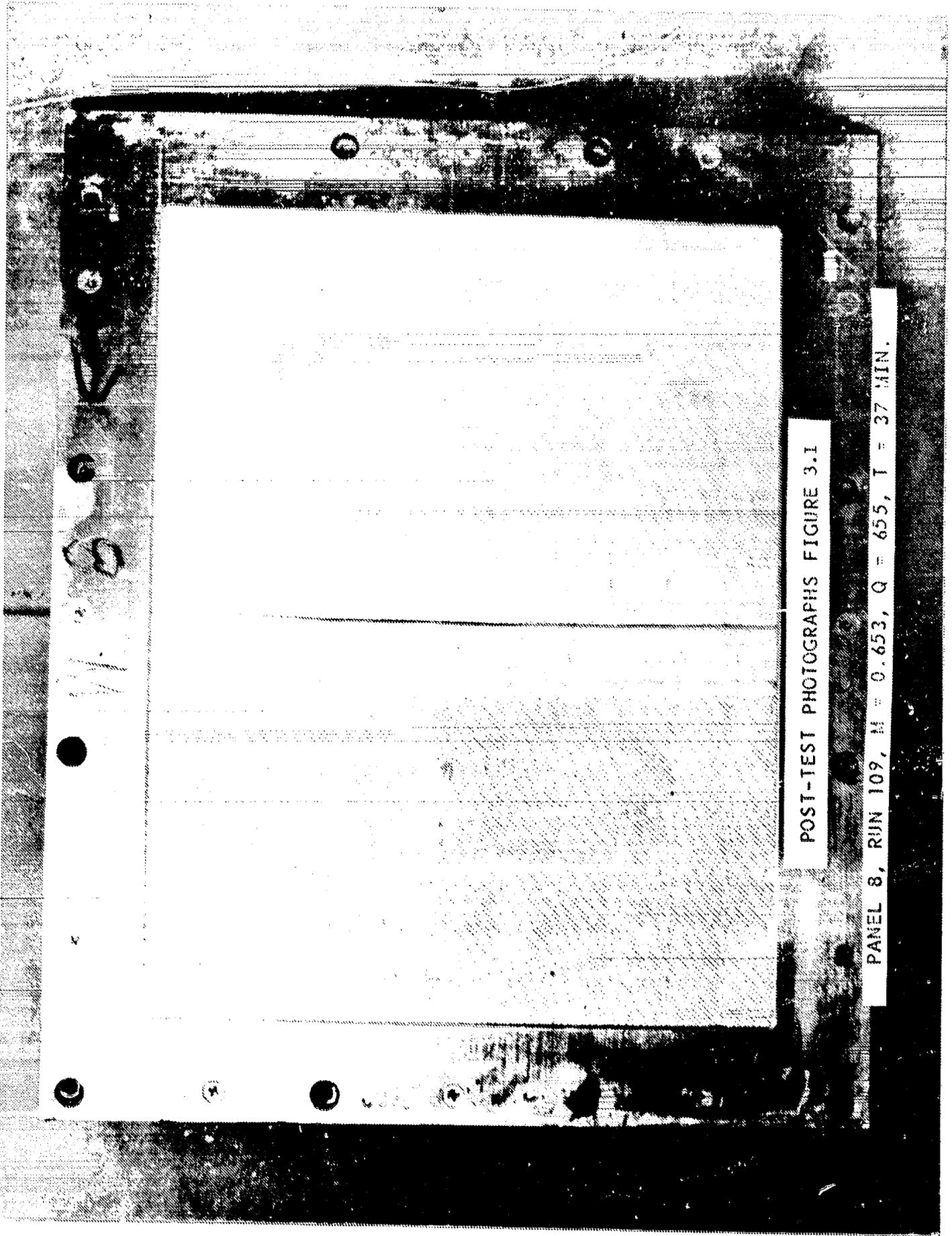


Handwritten markings on the left side of the page, including a large 'A' and an arrow pointing to the right.

POST-TEST PHOTOGRAPHS FIGURE 3.11

PANEL 7, RUN 118, M = 0.050, Q = 653, T = 10.5 MIN.

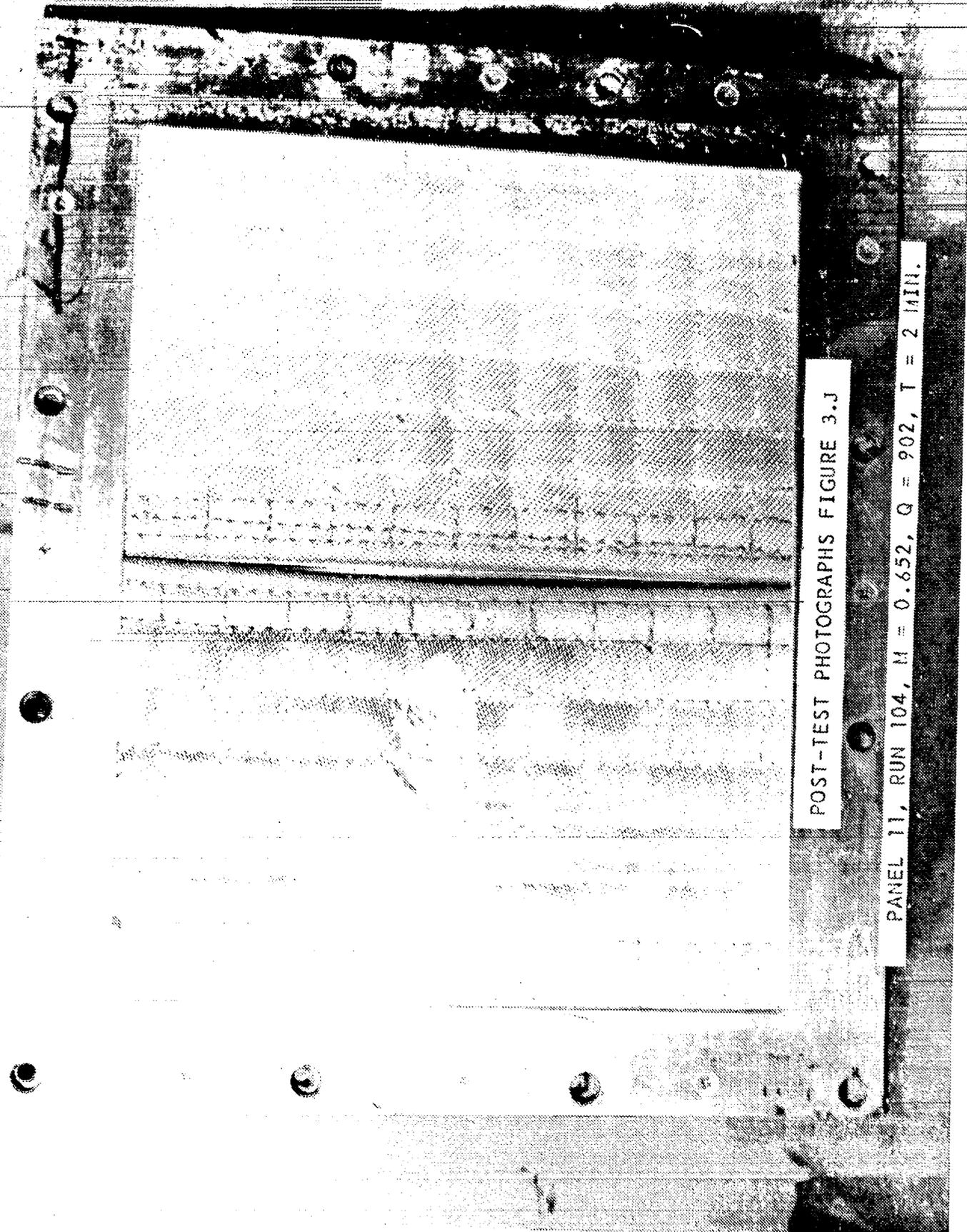
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POST-TEST PHOTOGRAPHS FIGURE 3.1

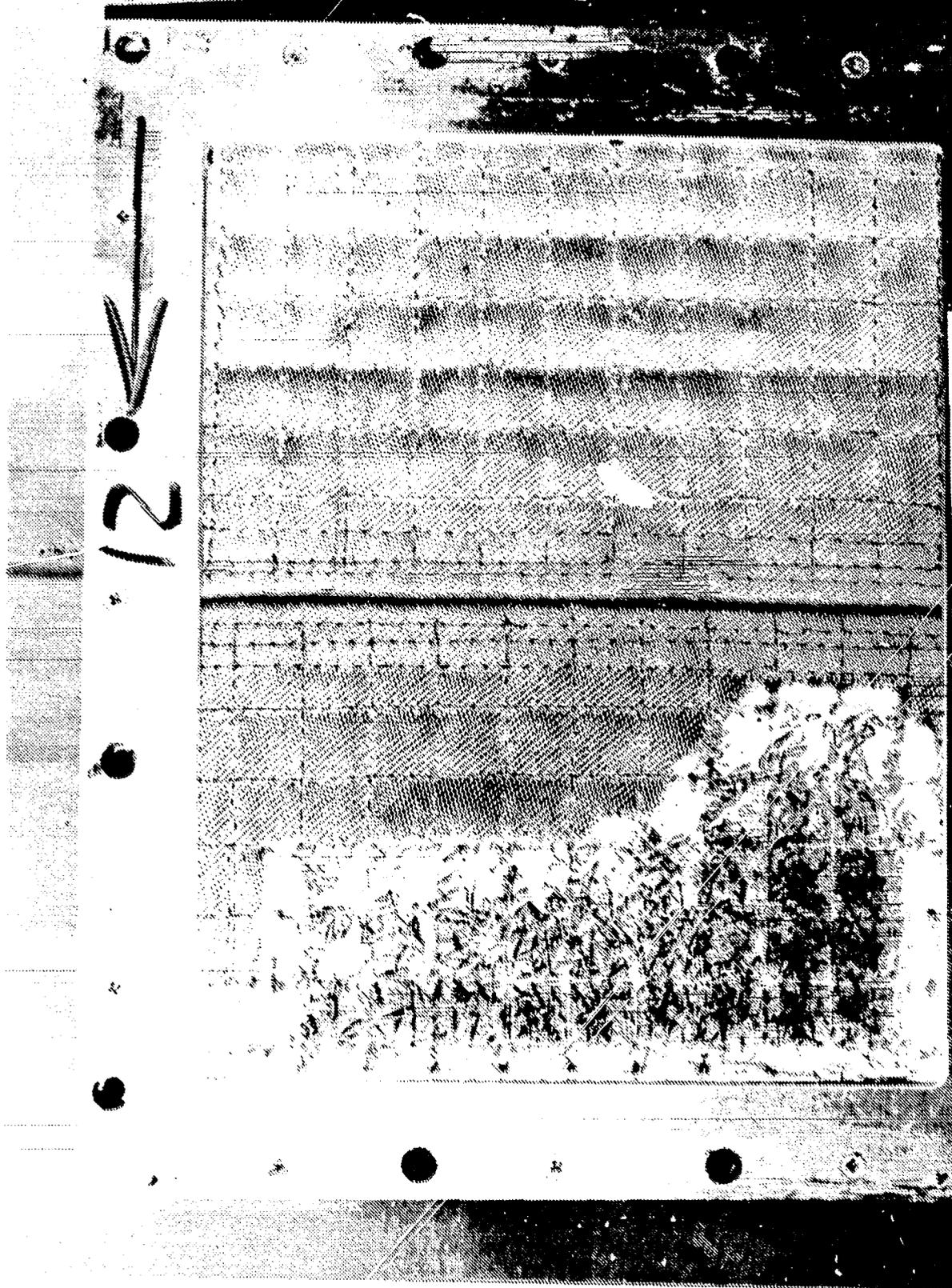
PANEL 8, RUN 109, H = 0.653, Q = 655, T = 37 MIN.

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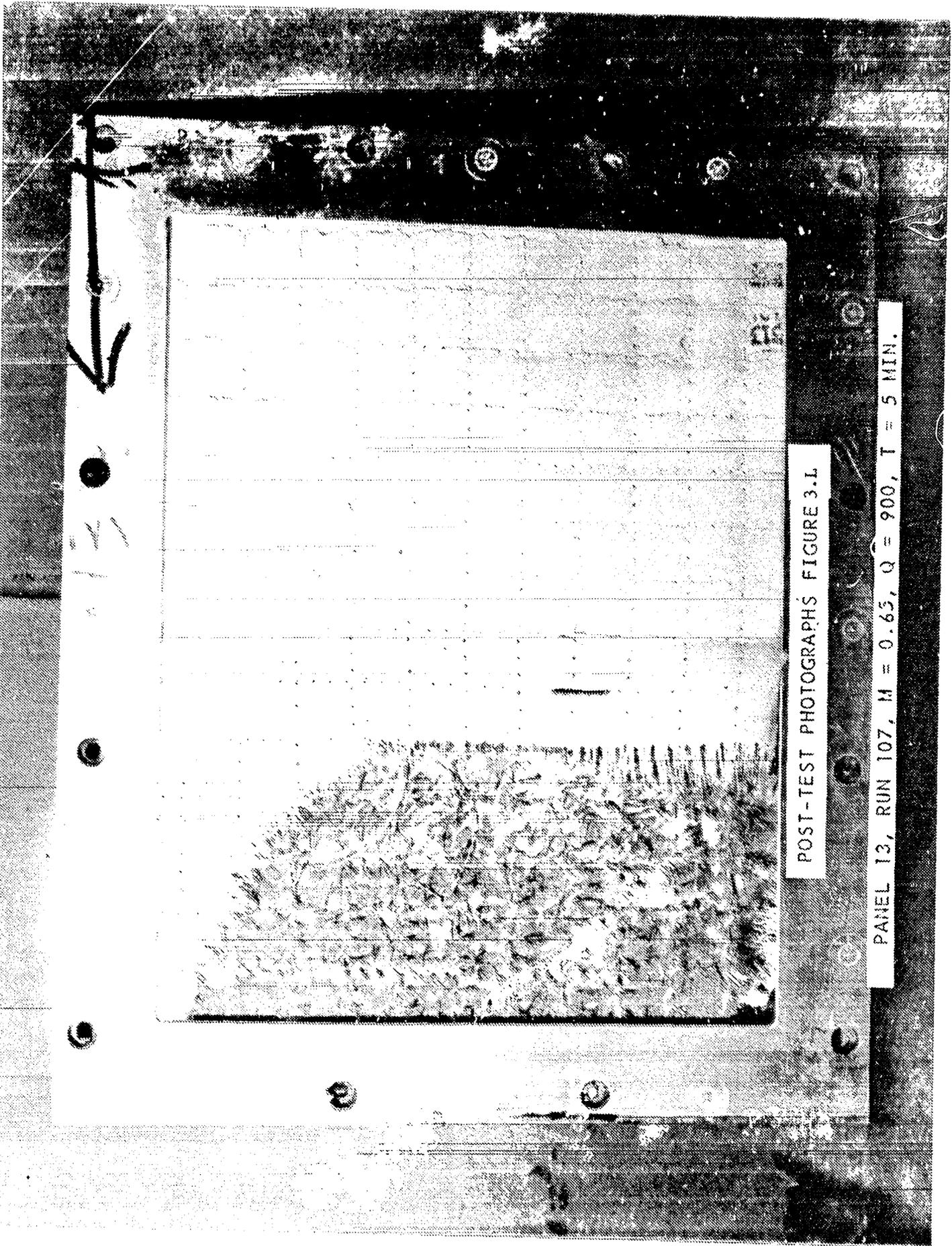


POST-TEST PHOTOGRAPHS FIGURE 3.J

PANEL 11, RUN 104, M = 0.652, Q = 902, T = 2 MIN.

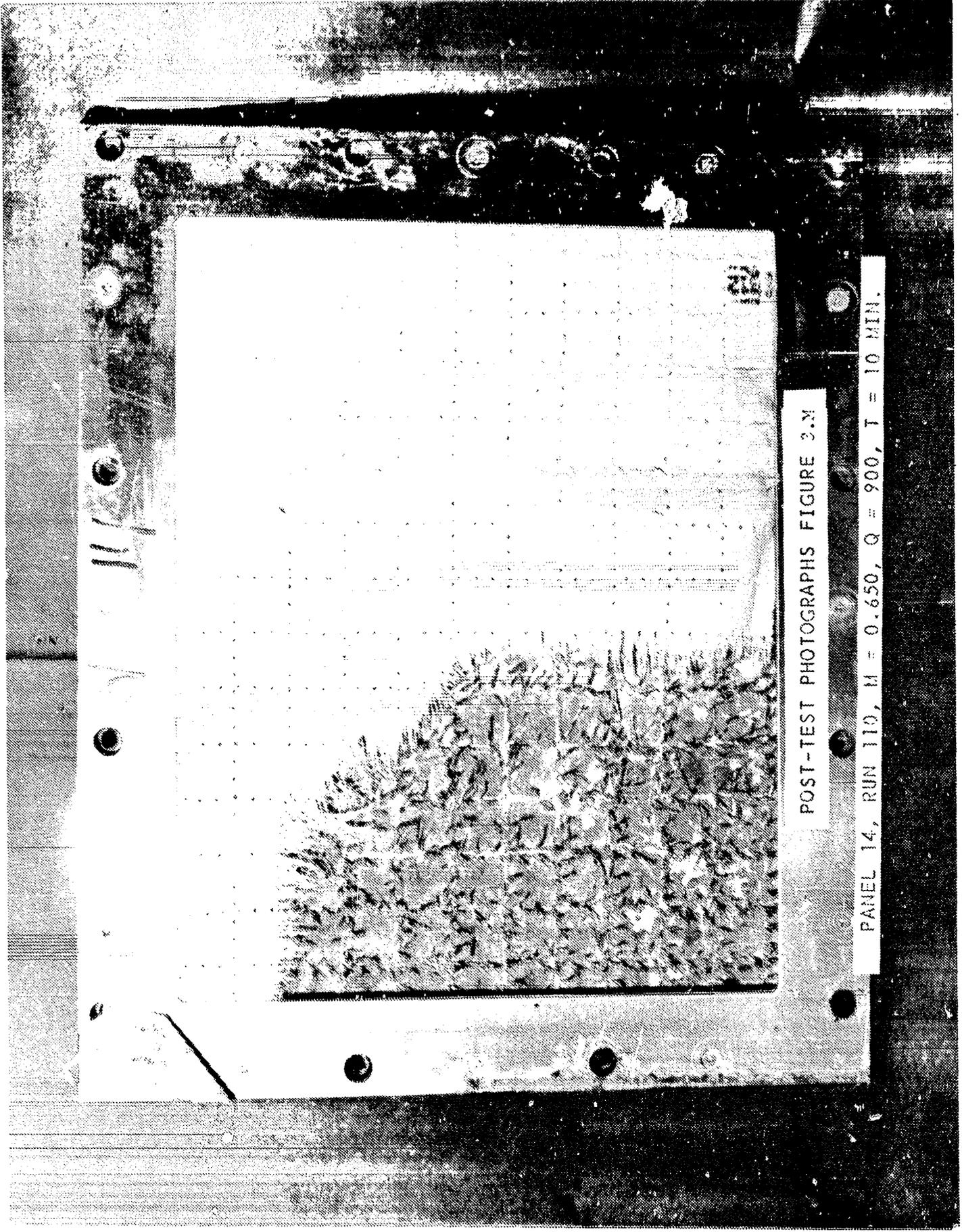


POST-TEST PHOTOGRAPHS FIGURE 3.K



POST-TEST PHOTOGRAPHS FIGURE 3-1

PANEL 13, RUN 107, M = 0.65, Q = 900, T = 5 MIN.



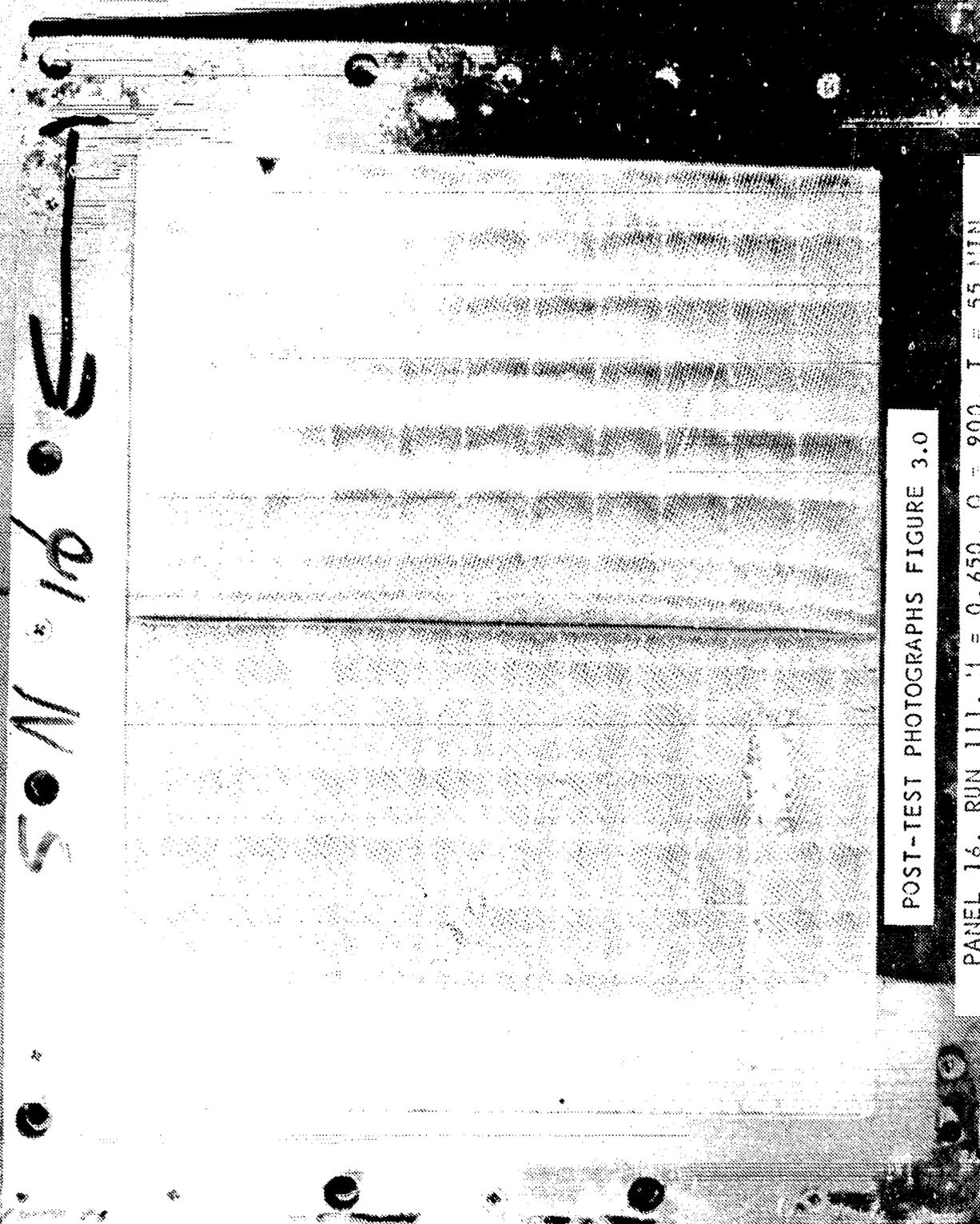
POST-TEST PHOTOGRAPHS FIGURE 3.M

PANEL 14, RUN 110, M = 0.650, Q = 900, T = 10 MIN.

15

POST-TEST PHOTOGRAPHS FIGURE 3.N

PANEL 15, RUN 113, N = 0.654, Q = 902, T = 21.5 MIN.



5011 16

POST-TEST PHOTOGRAPHS FIGURE 3.0

PANEL 16, RUN 111, H = 0.650, Q = 900, T = 55 MIN.

TEST O S - 3 1 0

ARC 2*2 TUNNEL
 CALIBRATION PANEL PRESSURE COEFFICIENTS
 RUN 78-2 MACH .851 Q=474 WEDGE HT 1.5; LT 29.8; AT X=-18.4
 LONGITUDINAL

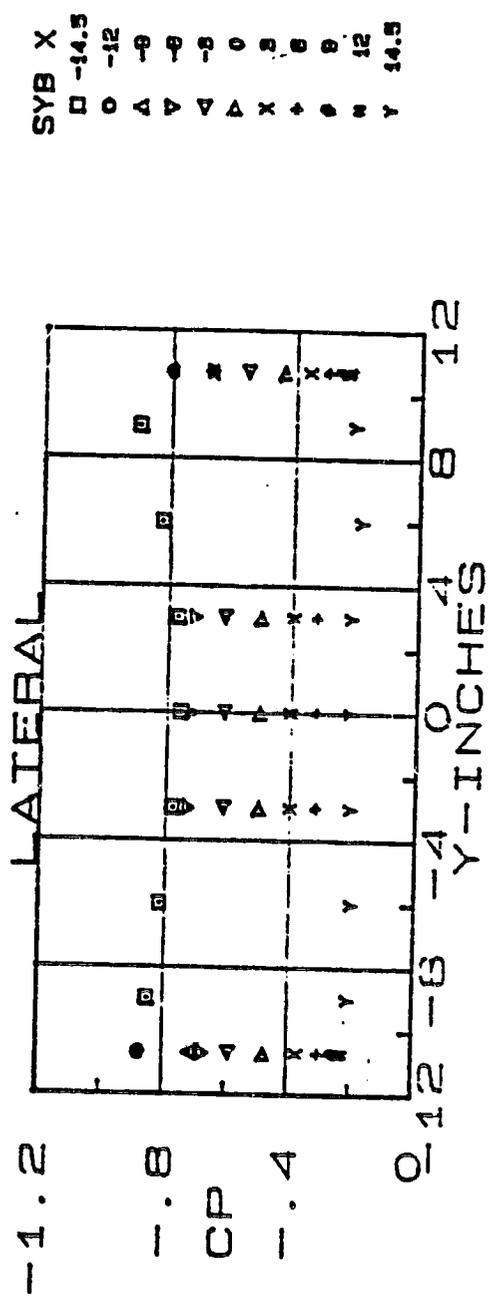
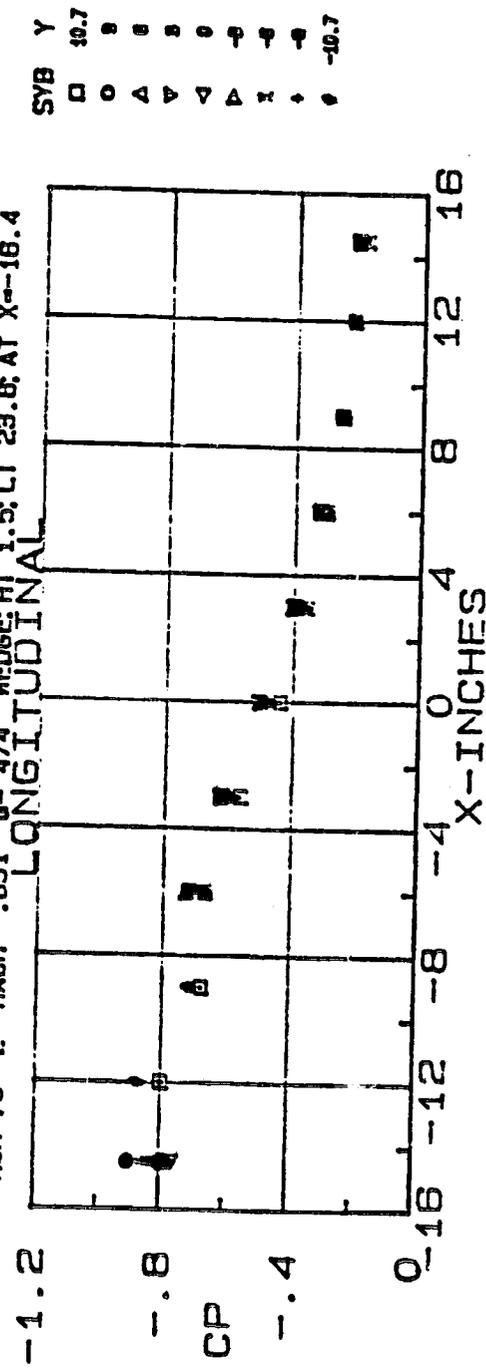
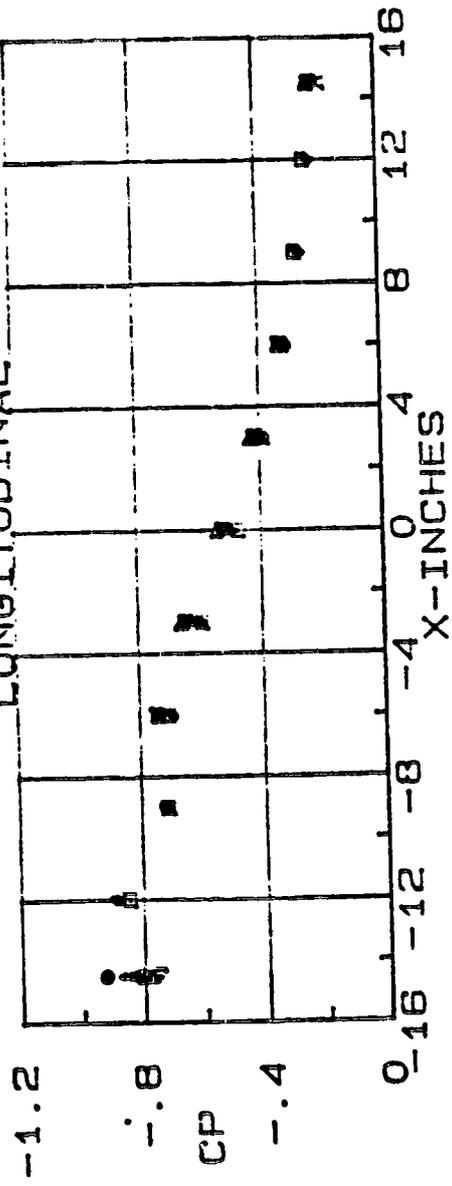


FIGURE 4.A

TEST O S - 3 1 0

ARC 2*2 TUNNEL
 CALIBRATION PANEL PRESSURE COEFFICIENTS
 RUN 79- 1 MACH .653 0- 841 WEDGE HT 1.5; LT 23.0; AT X=-18.4

SYB Y
 □ 10.7
 ○ 3
 △ 5
 ▽ 3
 ◁ 0
 ▷ 0
 × 0
 + 0
 ● -10.7



SYB X
 □ -14.5
 ○ -12
 △ -9
 ▽ -8
 ◁ -5
 ▷ 0
 × 8
 + 8
 ● 8
 * 12
 Y 14.5

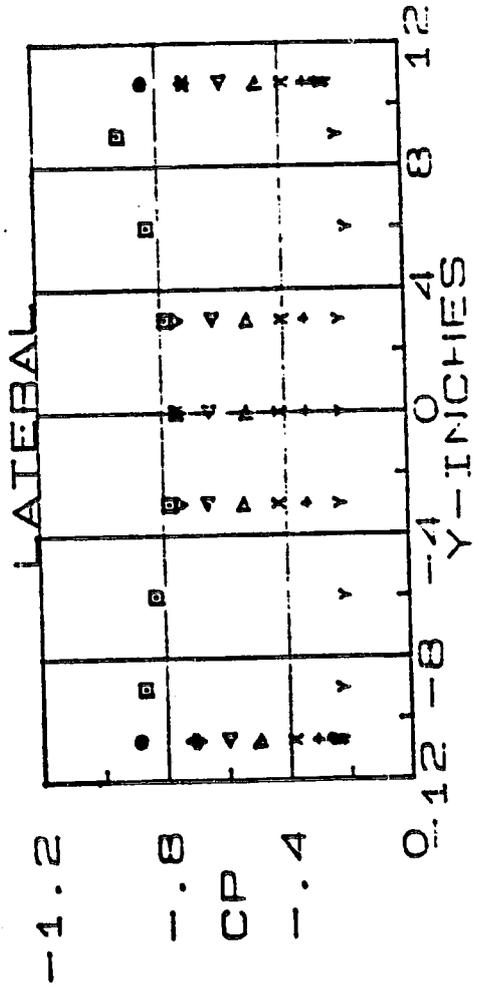
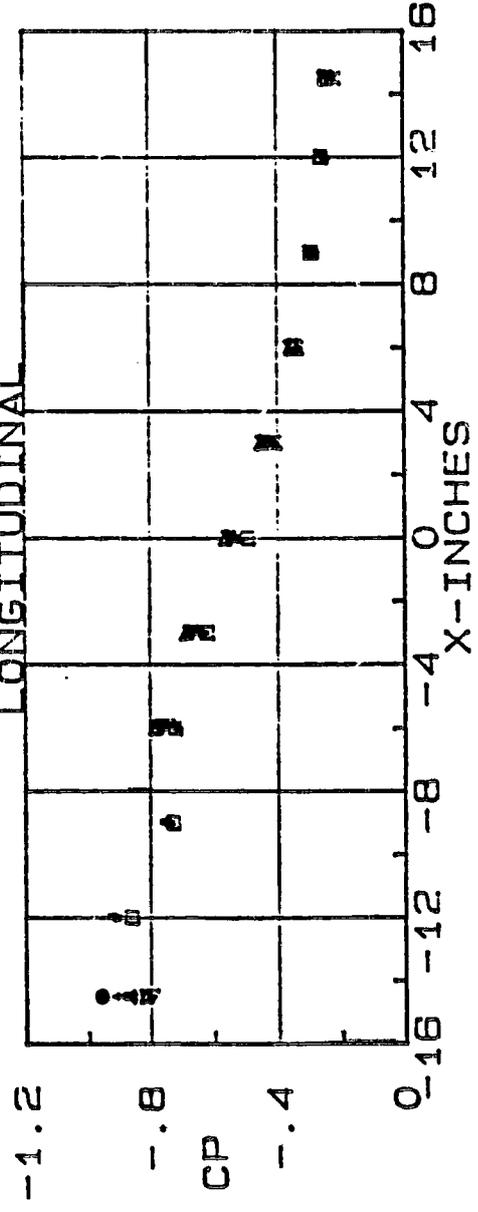


FIGURE 4.B

TEST OS-310

ARC 2*2 TUNNEL
 CALIBRATION PANEL PRESSURE COEFFICIENTS
 RUN 80-1 MACH .652 Q=793 WEDGE: HT 1.5; LT 24.0; AT X=-16.4

SYB Y
 □ 19.7
 ○ 9
 △ 3
 ▽ 3
 ◊ 0
 ▲ -3
 × -6
 † -9
 ● -19.7



SYB X
 □ -14.5
 ○ -12
 △ -9
 ▽ -6
 ◊ -3
 ▲ 0
 × 3
 † 6
 ● 12
 Y 14.5

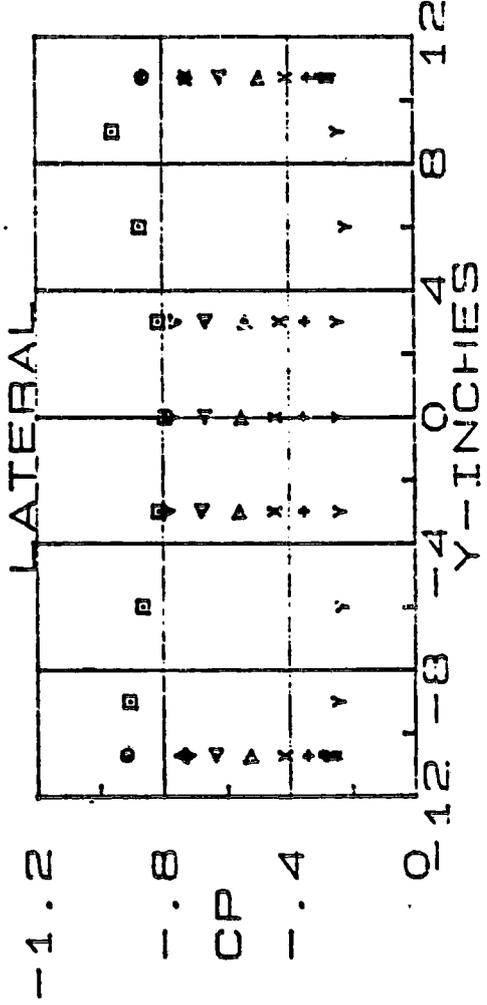


FIGURE 4.C

TEST OS-310

ARC 2*2 TUNNEL
 CALIBRATION PANEL PRESSURE COEFFICIENTS
 RUN 81-1 MACH .851 Q=993 WEPSE: HT 1.5; LI 23.6; AT X=-18.4

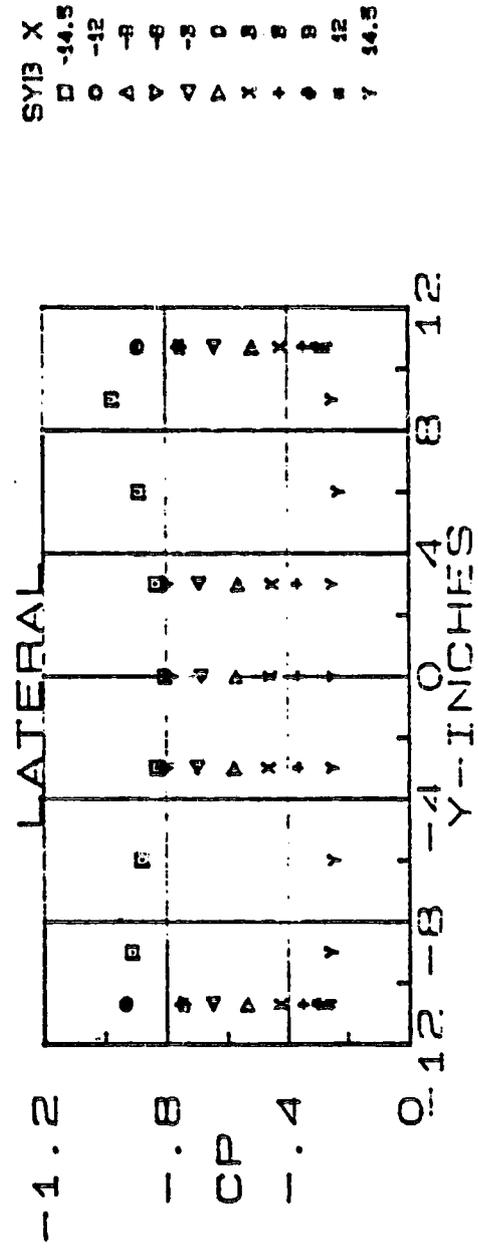
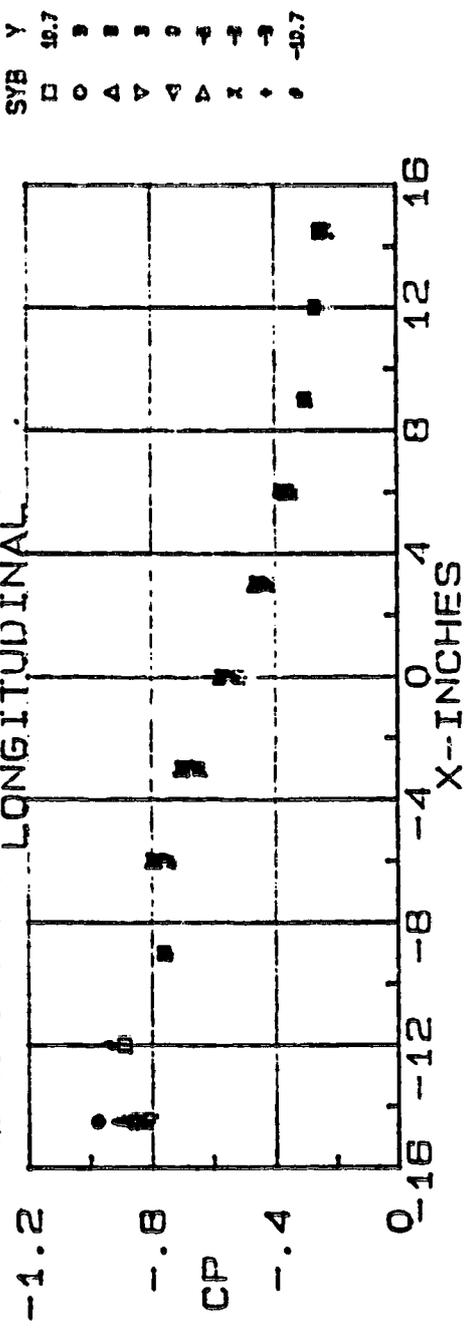


FIGURE 4.D

TEST OS-310

ARC 2*2 TUNNEL
 CALIBRATION PANEL PRESSURE COEFFICIENTS
 RUN 62-1 MACH .853 Q=792 WEDGE: HT 1.9; LT 23.8; AT X=-18.4
 LONGITUDINAL

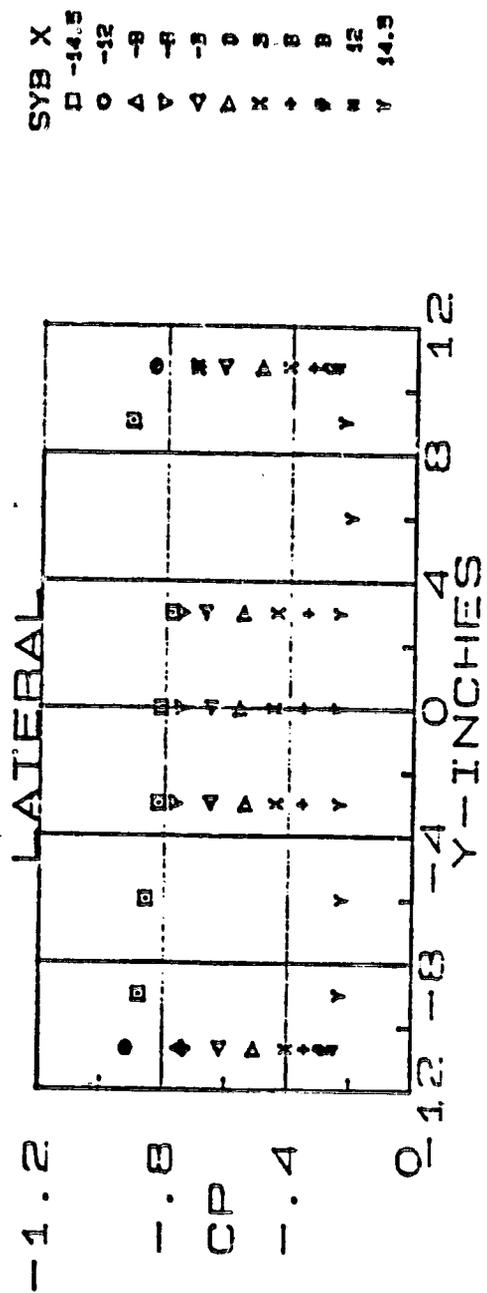
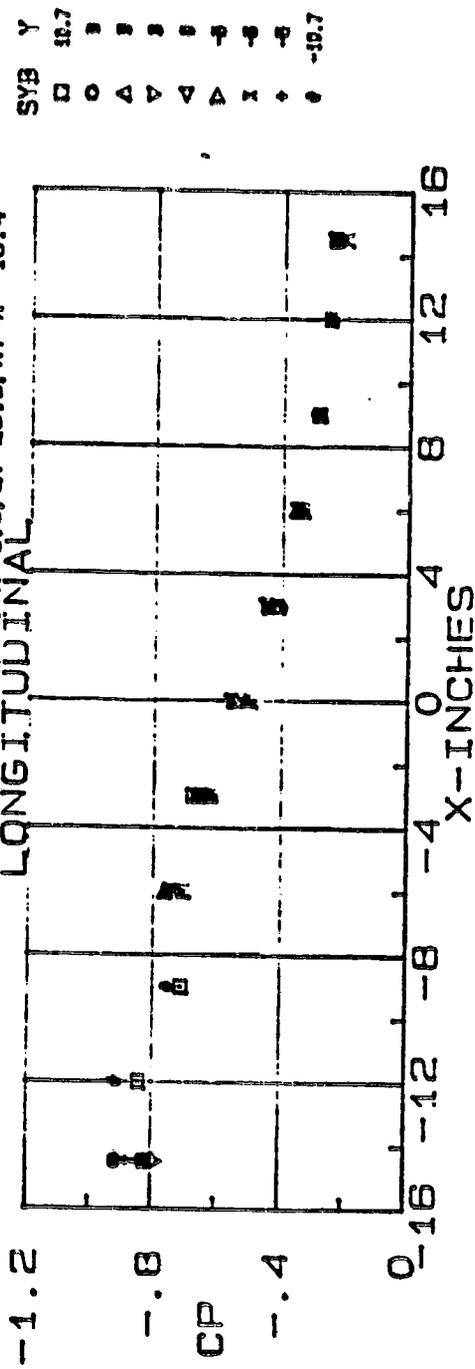


FIGURE 4.E

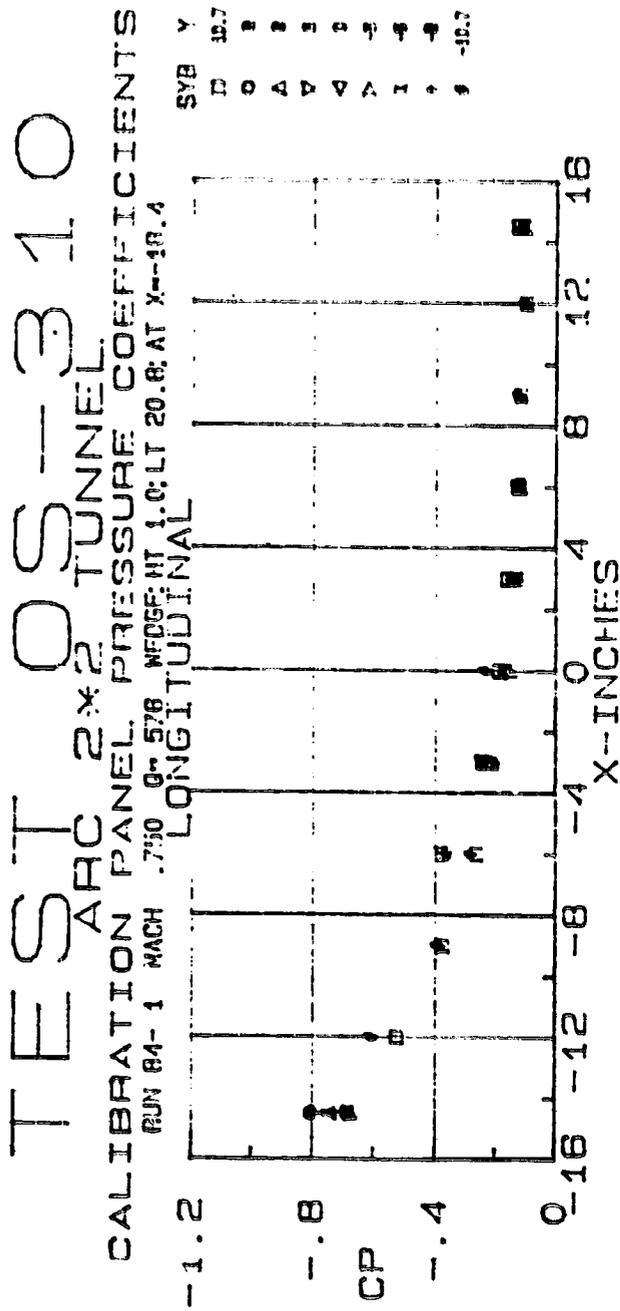


FIGURE 4.F

TEST OS-310

ARC 2x2 TUNNEL

CALIBRATION PANEL PRESSURE COEFFICIENTS

RUN 65-2 MACH .752 Q=771 WEDGE HT 1.0; LT 20.8; AT X=16.4

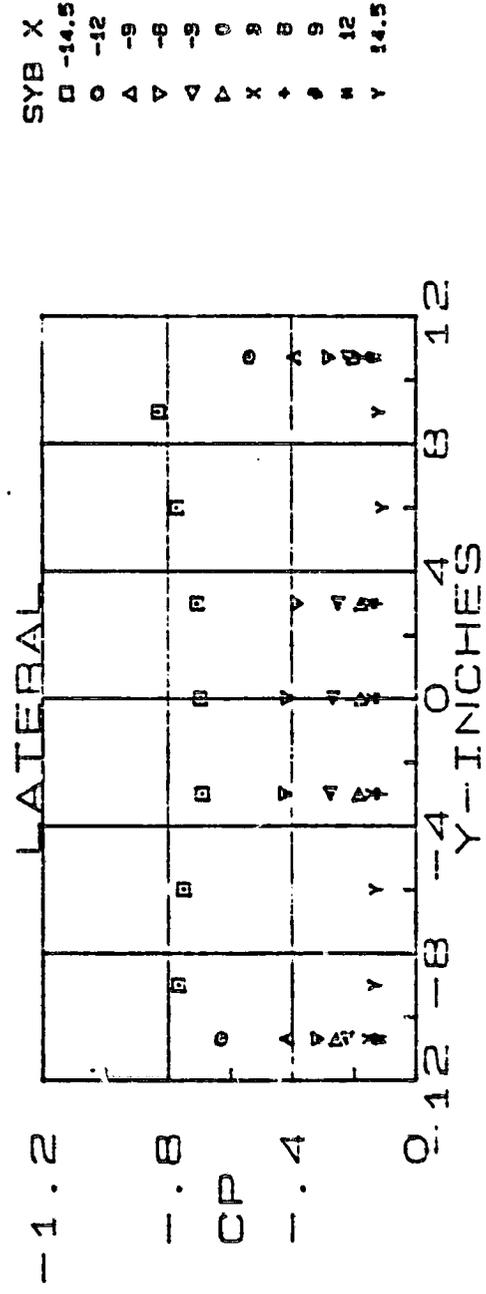
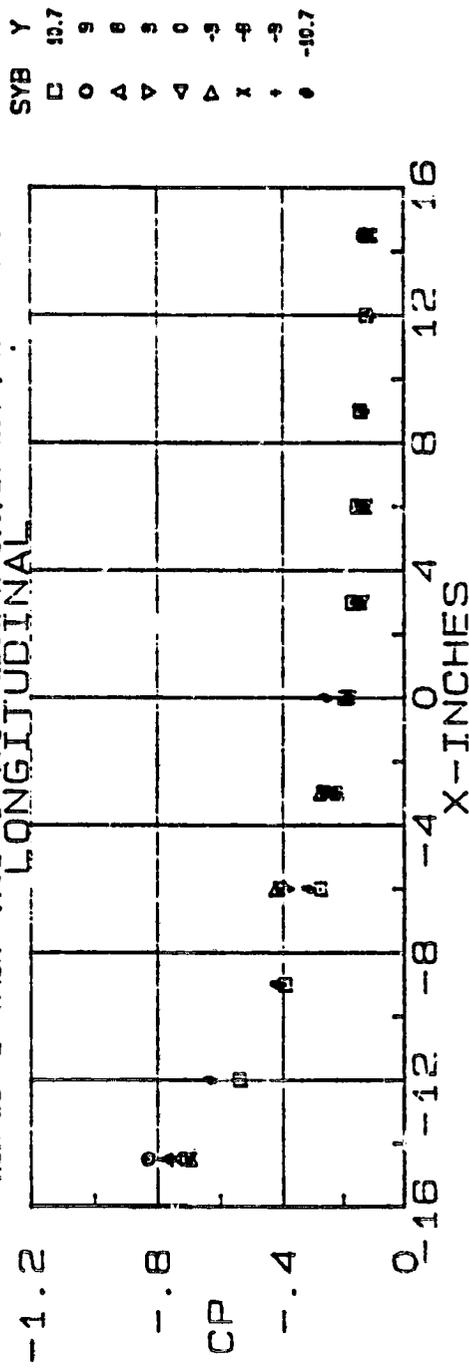


FIGURE 4.6

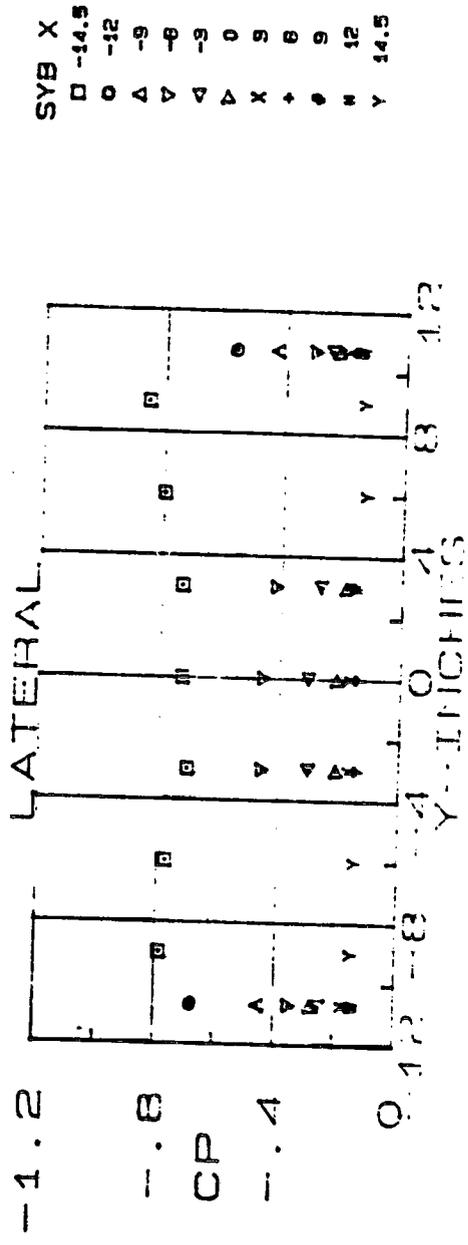
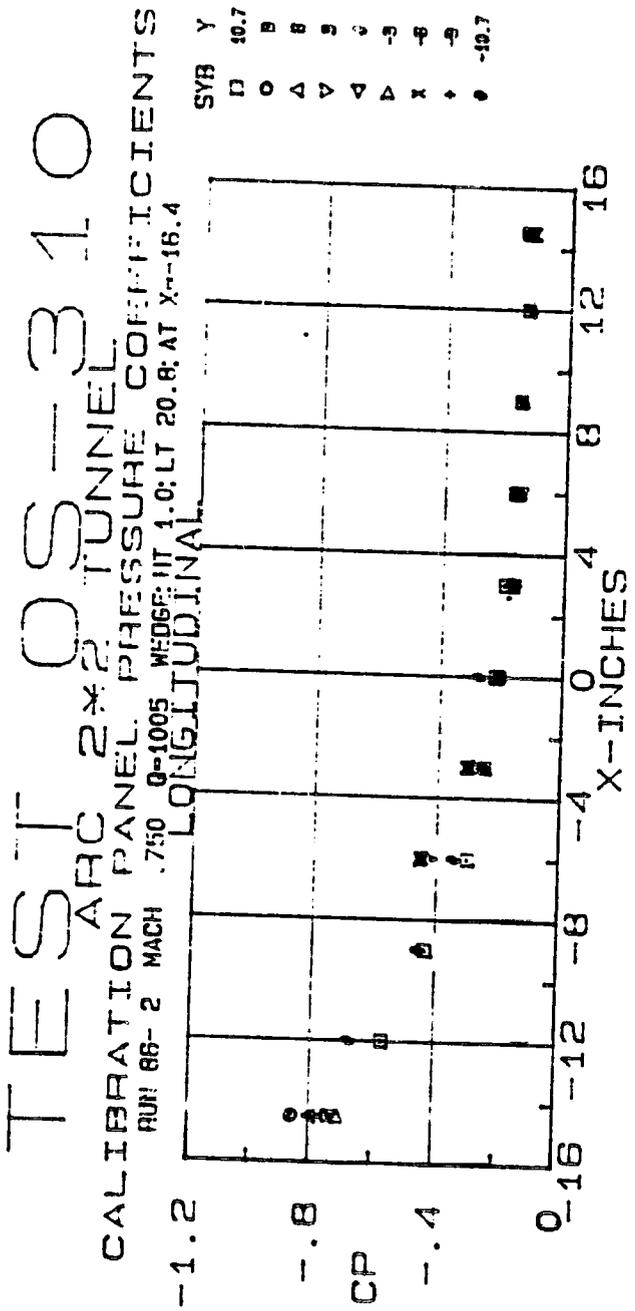


FIGURE 4.H

TEST OS-310

ARC 2*2 TUNNEL
 CALIBRATION PANEL PRESSURE COEFFICIENTS
 RUN 87-3 MACH .849 Q=860 WEDGE: HT .5; LT 20.8; AT X=-16.4
 LONGITUDINAL

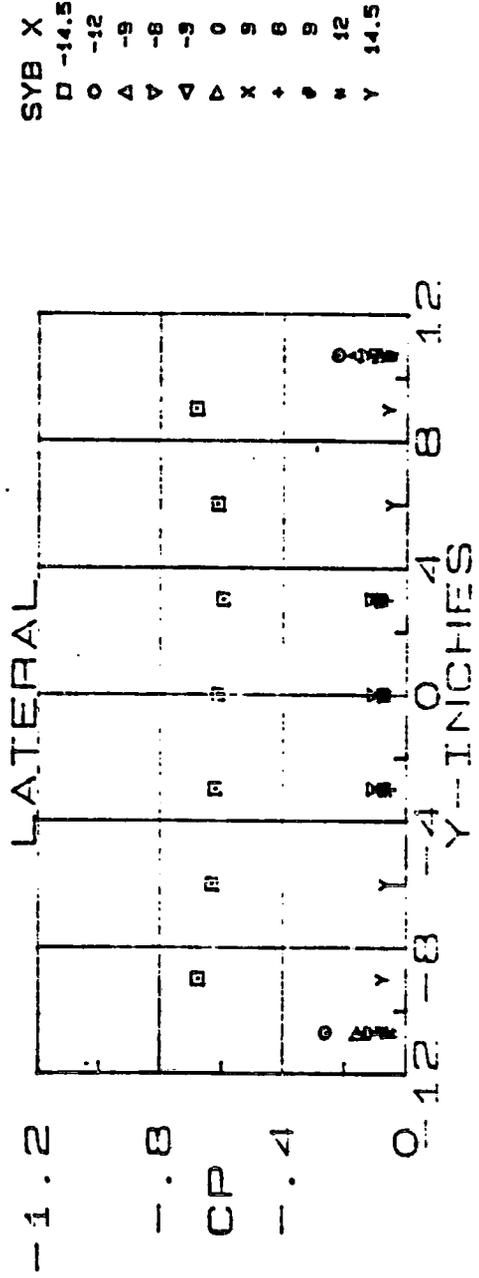
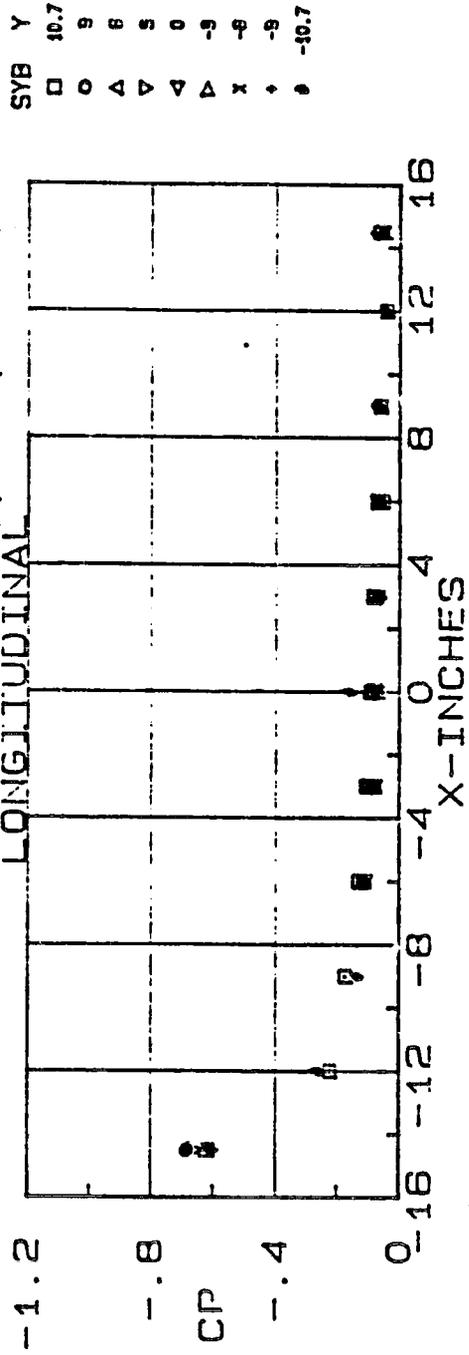


FIGURE 4.1

TEST OS-310

ARC 2x2 TUNNEL

CALIBRATION PANEL PRESSURE COEFFICIENTS
 HUN 68-2 MACH .851 Q=1004 WEDGE HIT .5; LT 20.8; AT X=-16.4
 LONGITUDINAL

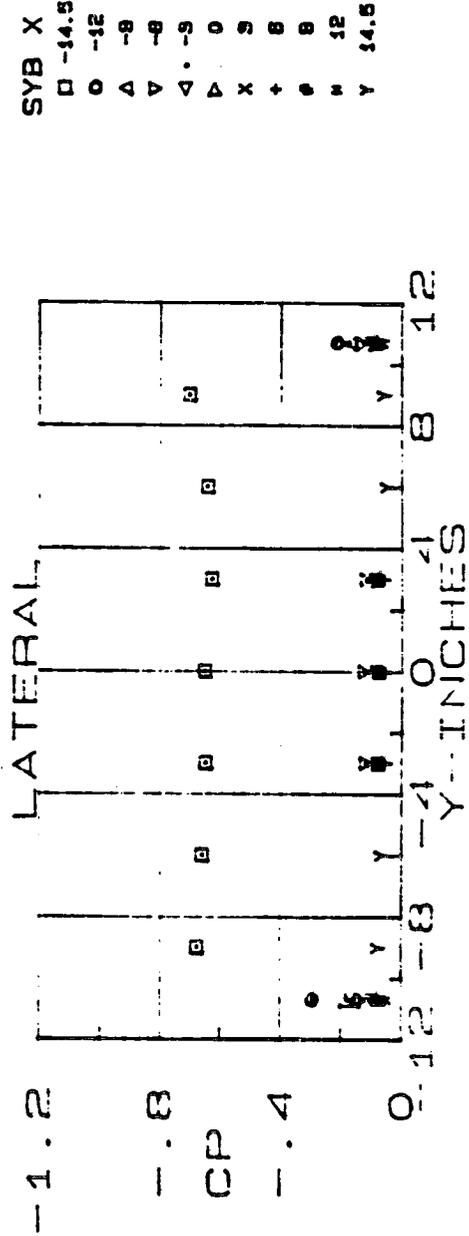
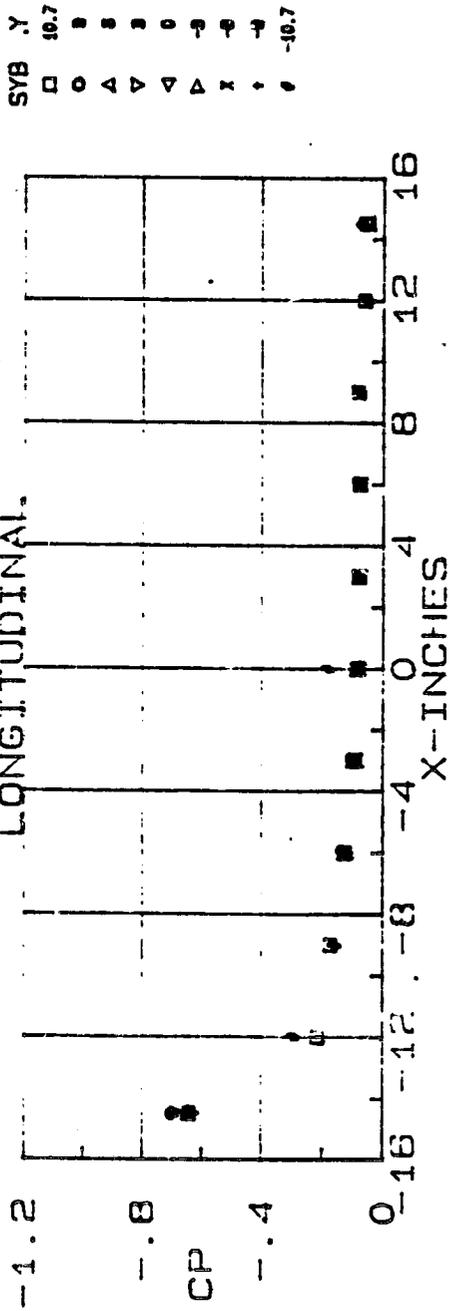


FIGURE 4.J

TEST OS-310

ARC 2*2 TUNNEL

CALIBRATION PANEL PRESSURE COEFFICIENTS

RUN 89-1 MACH .848 Q=1005 WEDGE HT .5; LT 20.8; AT X=-16.4

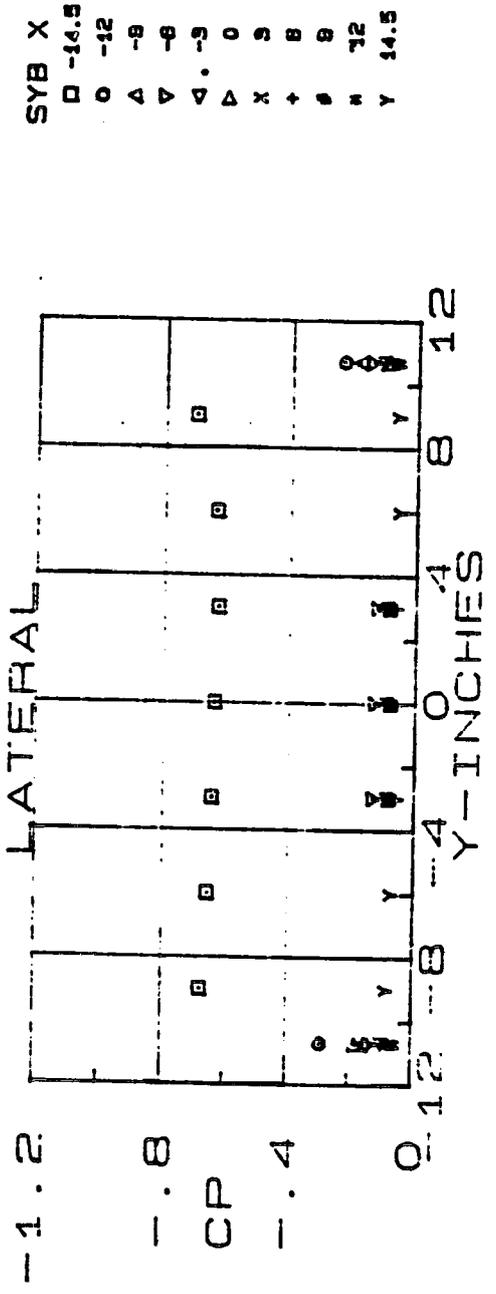
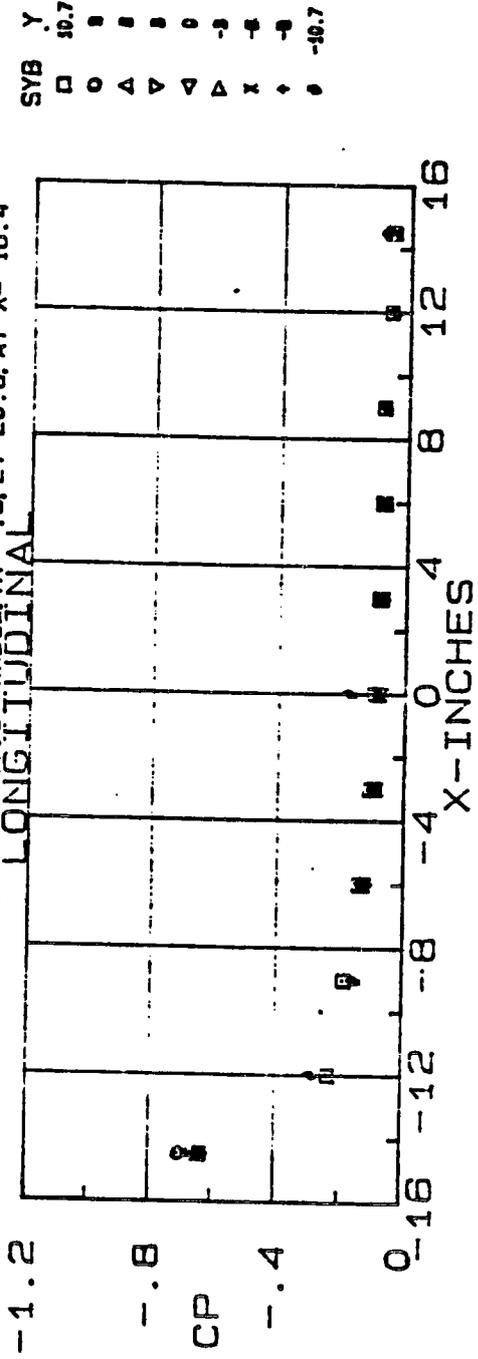


FIGURE 4.K

TEST OS-310
 ARC 2 WAVE TUNNEL
 PANEL PRESSURE COEFFICIENTS

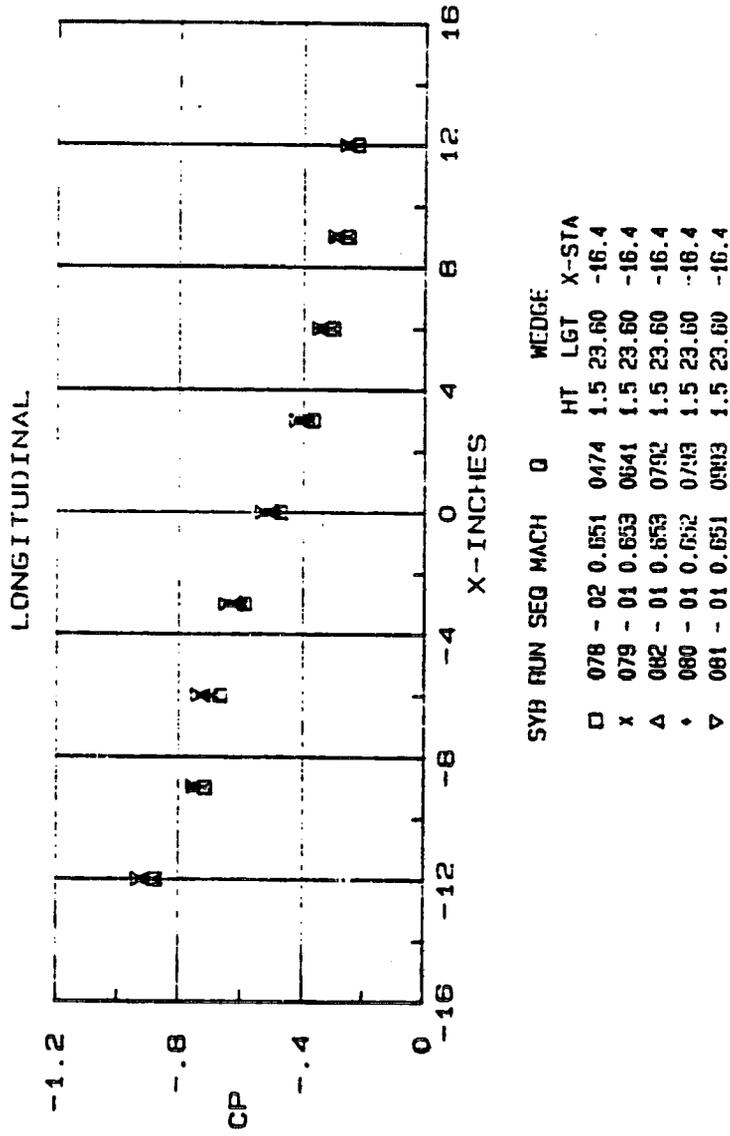


FIGURE 5.A

TEST OS-310

ARC 2x2 TUNNEL
PANEL PRESSURE COEFFICIENTS

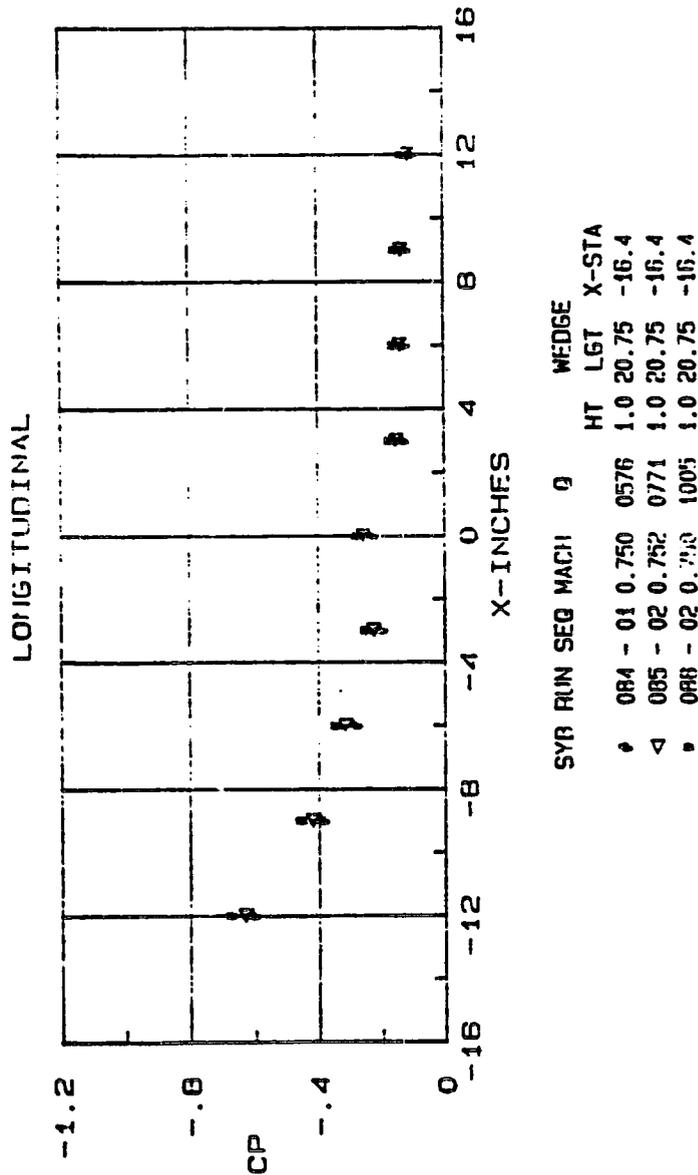


FIGURE 5.B

TEST OS-310

ARC 2x2 TUNNEL
PANEL PRESSURE COEFFICIENTS

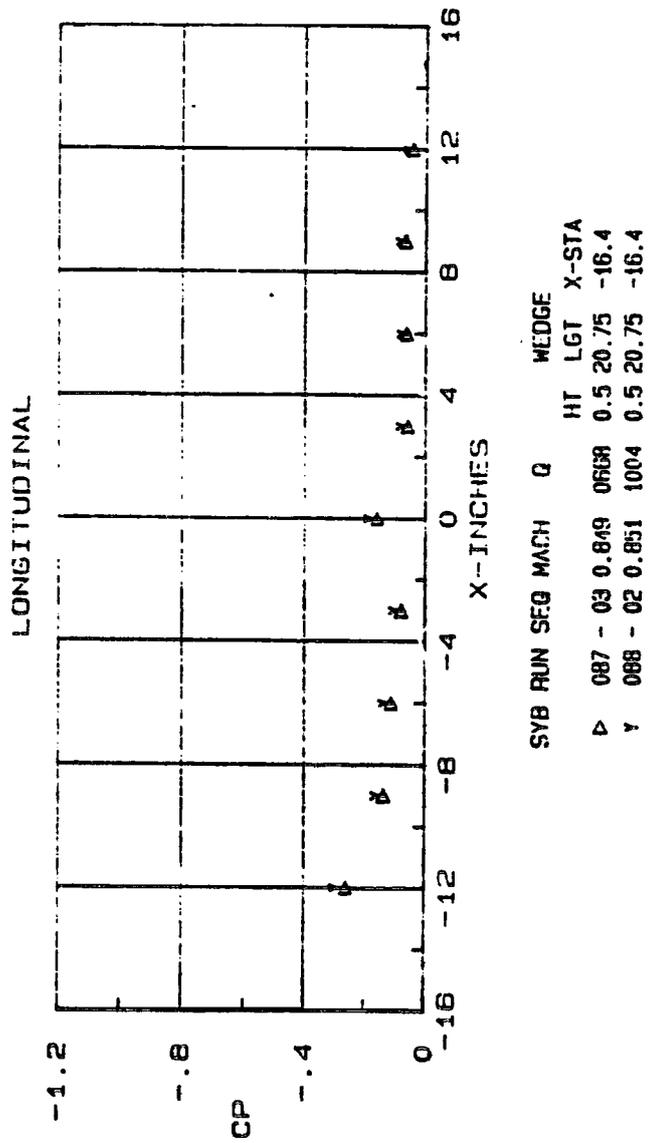


FIGURE 5.C

SYB RUN	SEQ	MACH	Q	WEDGE	HT	LGT	X-STA
▷	087	- 03	0.849	0568	0.5	20.75	-16.4
Y	088	- 02	0.851	1004	0.5	20.75	-16.4

TEST OS-31.0

ARC 2x2 TUNNEL

PANEL PRESSURE COEFFICIENTS

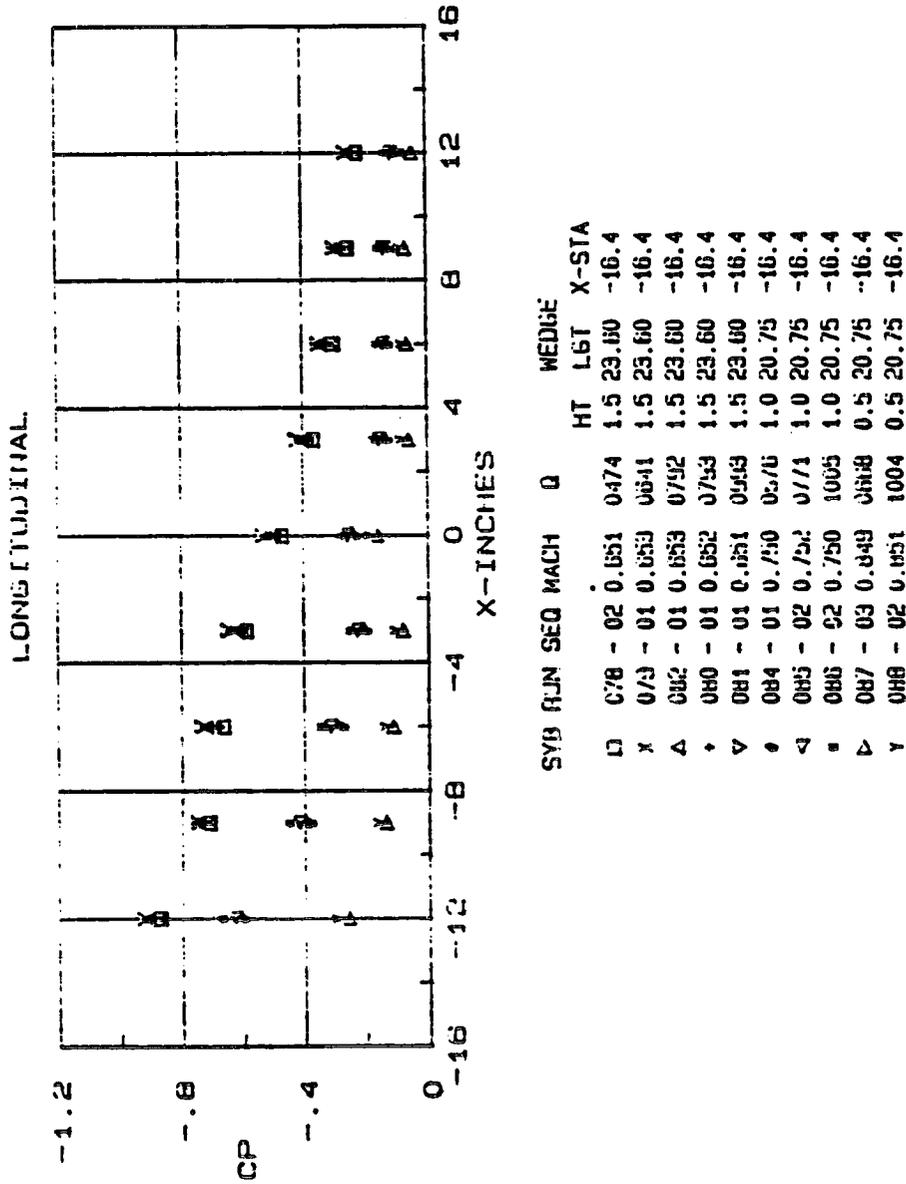


FIGURE 6.A

TEST OS-310
 ARC 2x2 TUNNEL
 PANEL PRESSURE COEFFICIENTS

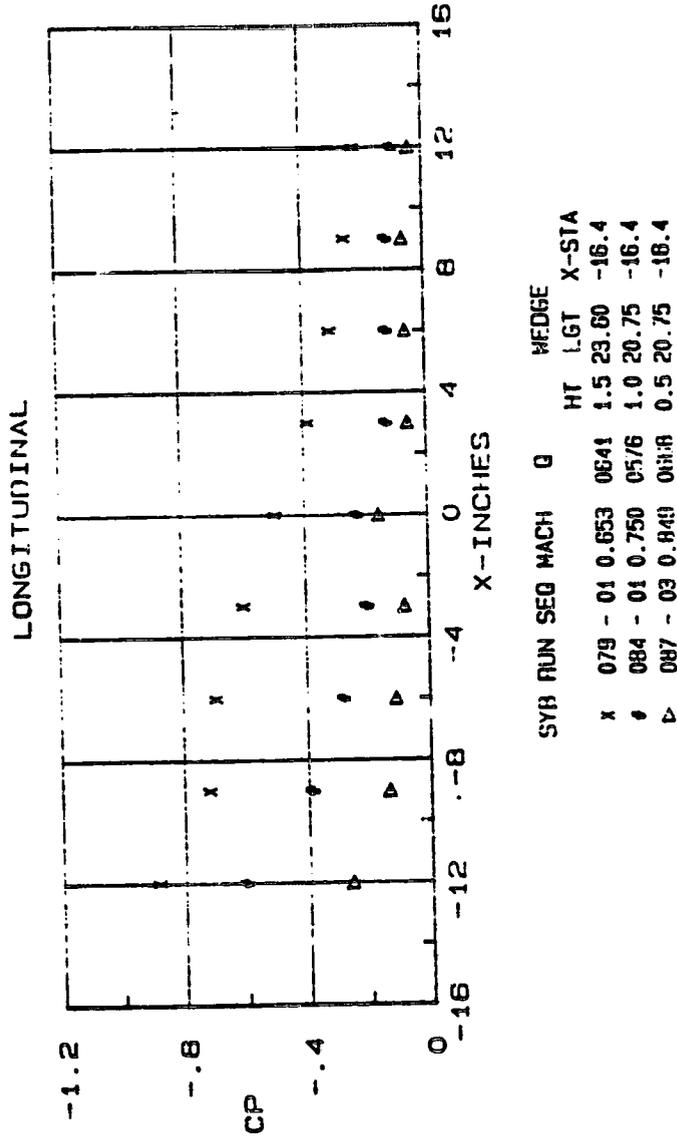


FIGURE 6.B

TEST OS-310

ARC 2x2 TUNNEL
 PANEL PRESSURE COEFFICIENTS

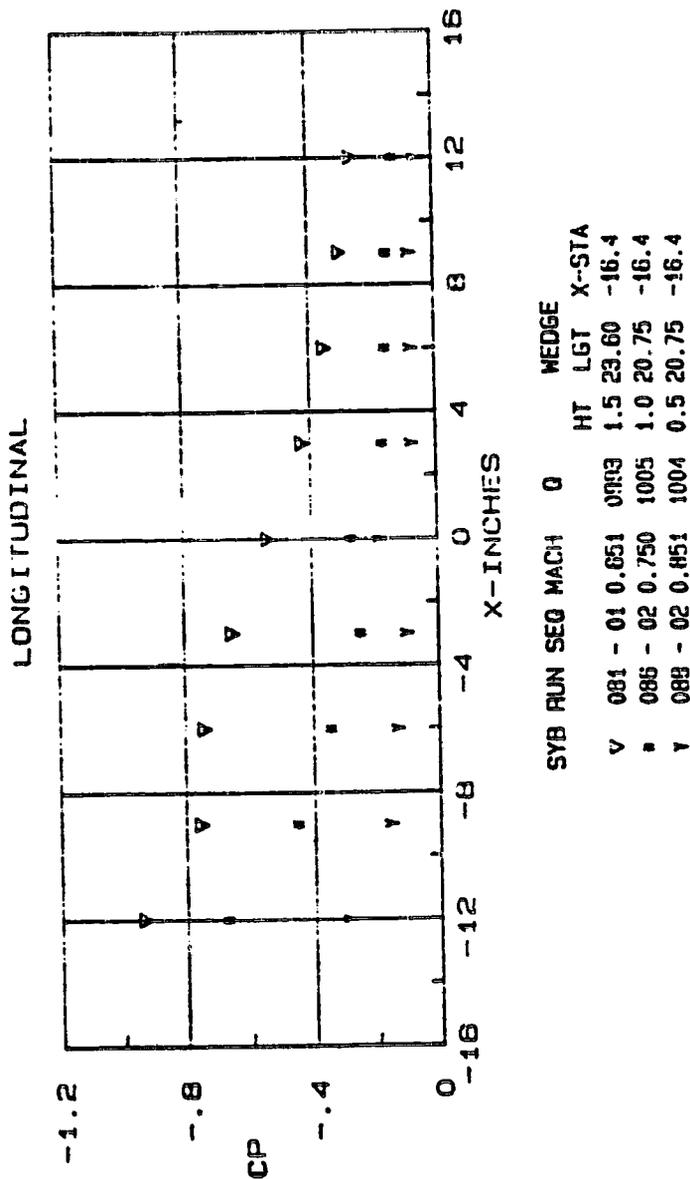
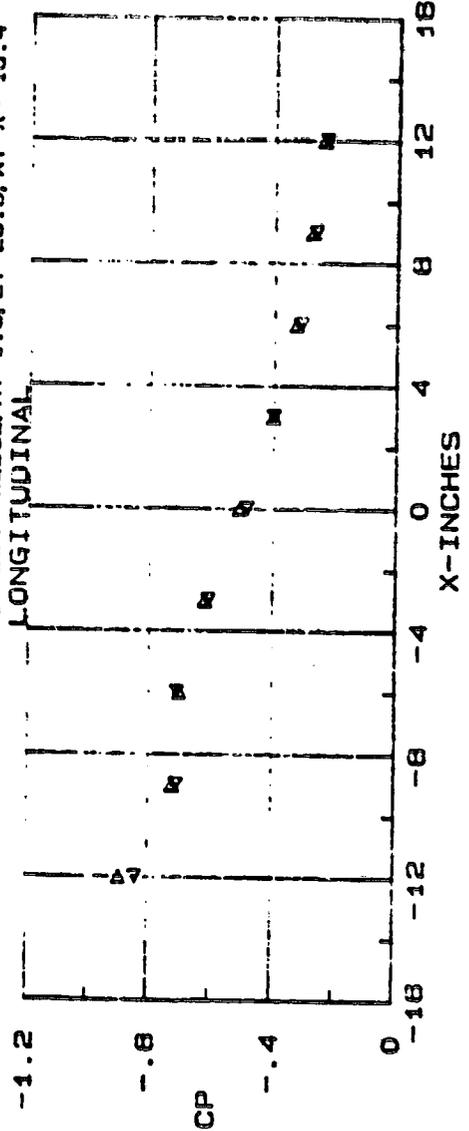


FIGURE 6.C

TEST OS-310

ARC 2*2 TUNNEL
 PANEL PRESSURE COEFFICIENTS
 RUN 100-10 MACH .652 WEDGE: WT 1.5; LT 23.6; AT X=-16.4

SYB Y
 ◁ 30.7
 ▷ -30.7



SYB X
 ▲ -34.5
 ▼ 34.5

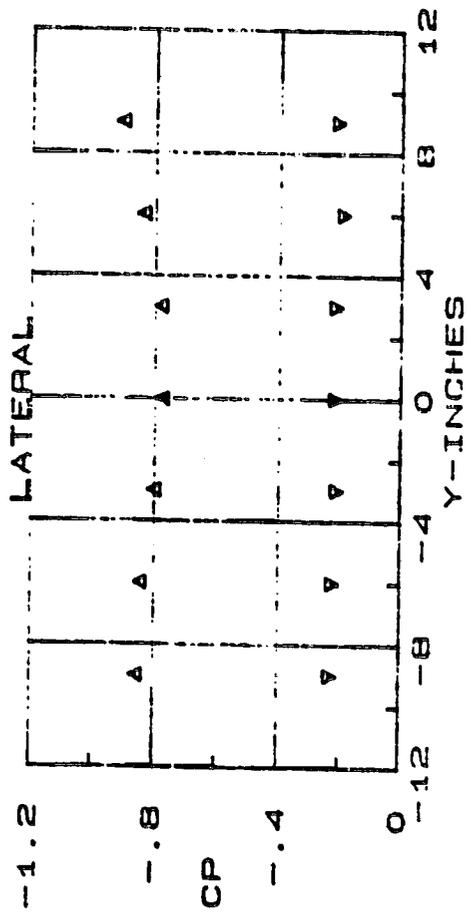
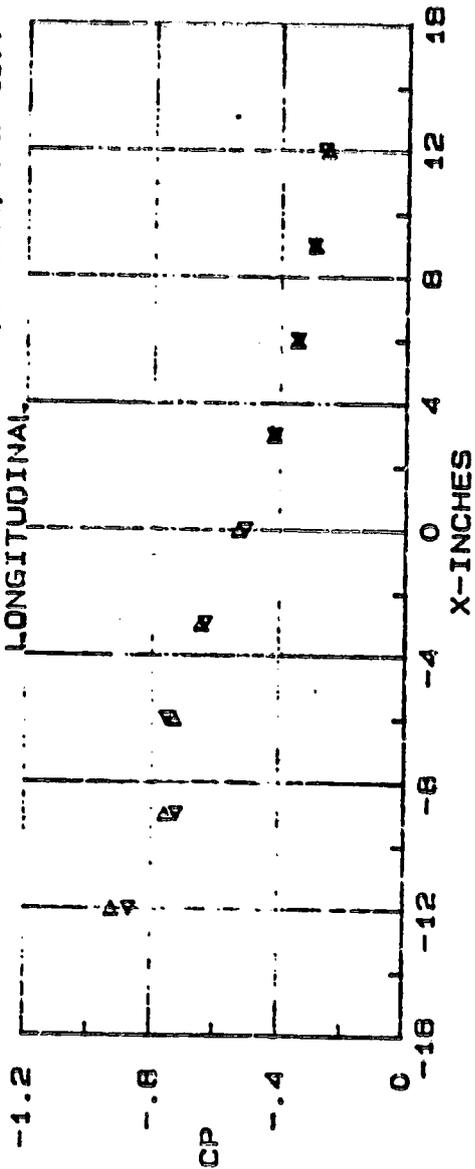


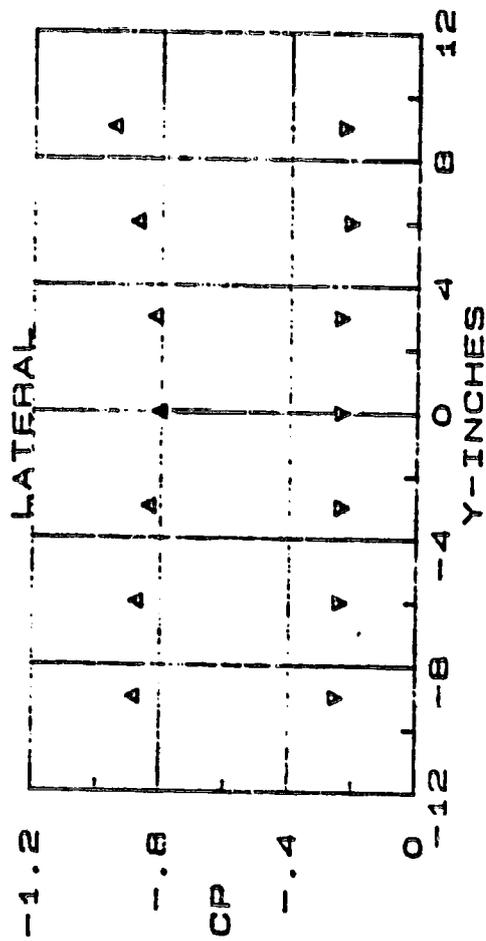
FIGURE 7.A

TEST OS-310

ARC 2*2 TUNNEL
 PANEL PRESSURE COEFFICIENTS
 RUN 102-18 MACH .650 $\theta = 902$ WEDGE: HT 1.5: LT 23.0: AT X=-16.4



SYB Y
 ▲ 10.7
 ▼ -10.7



SYB X
 ▲ -14.5
 ▼ 14.5

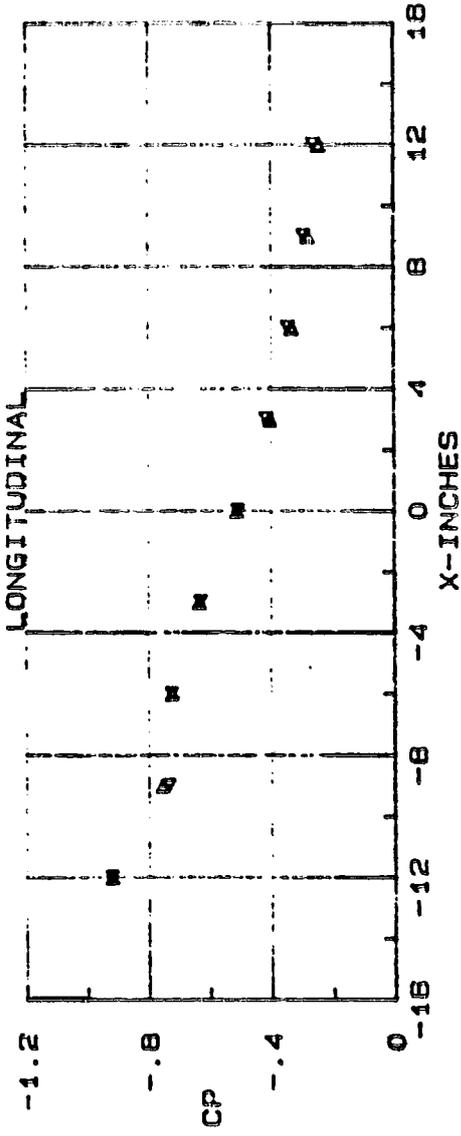
FIGURE 7.5

TEST OS-310

ARC 2*2 TUNNEL
 PANEL PRESSURE COEFFICIENTS

RUN 103-6 MACH .650 Q=901 WEDGE: HT 1.5; LI 23.6; AT X=-16.4

SYB Y
 ◁ 39.7
 ▷ -19.7



SYB X
 ▲ -14.5
 ▼ 14.5

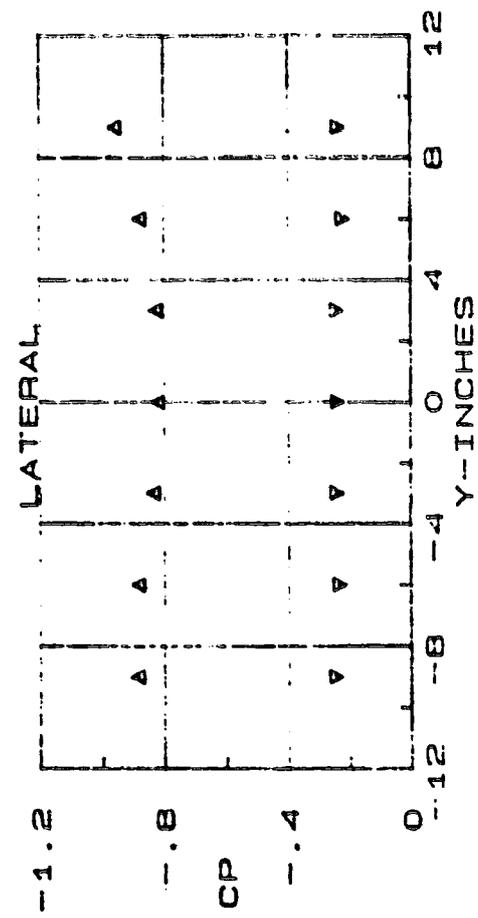


FIGURE 7.C

TEST O S - 3 1 0

ARC 2*2 TUNNEL

PANEL PRESSURE COEFFICIENTS
 RUN 104-5 MACH .653 Q= 905 WEDGE: HT 1.5; LT 23.8; AT X=-16.4
 LONGITUDINAL

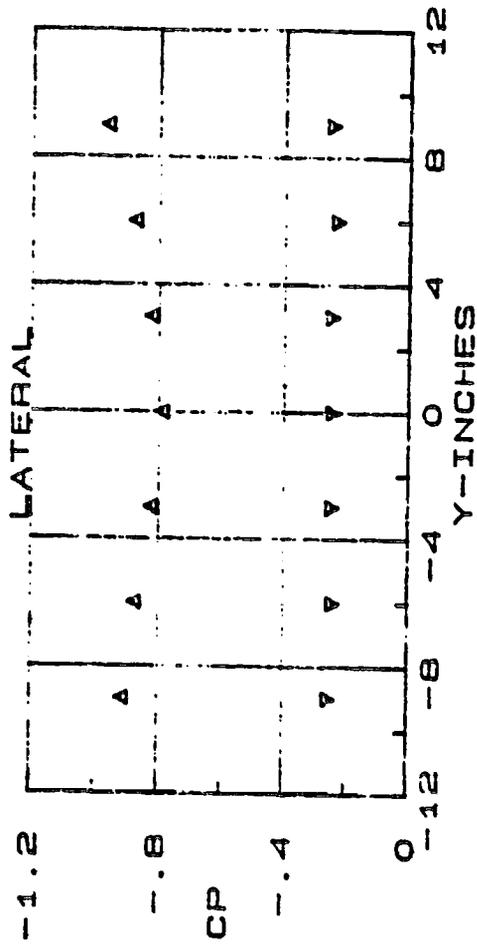
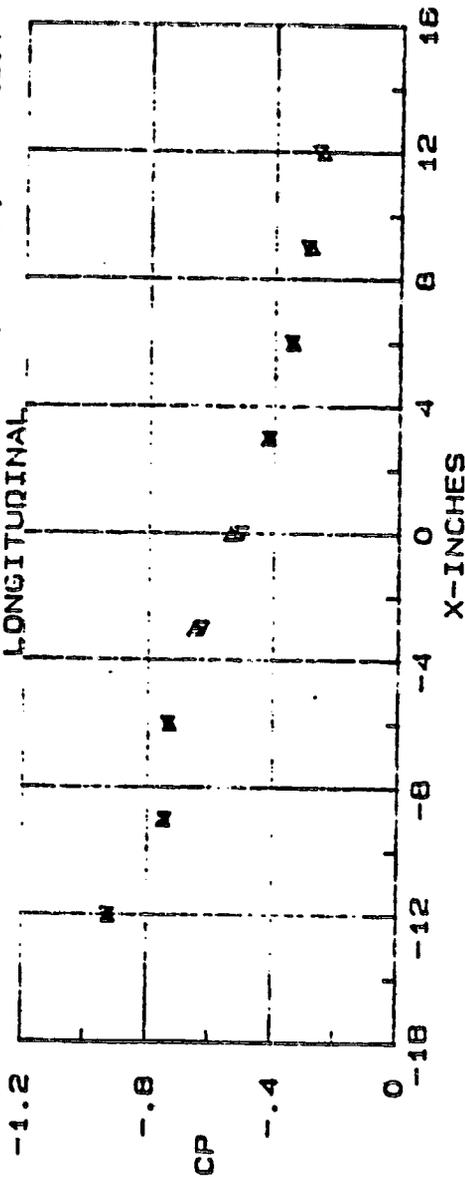


FIGURE 7.D

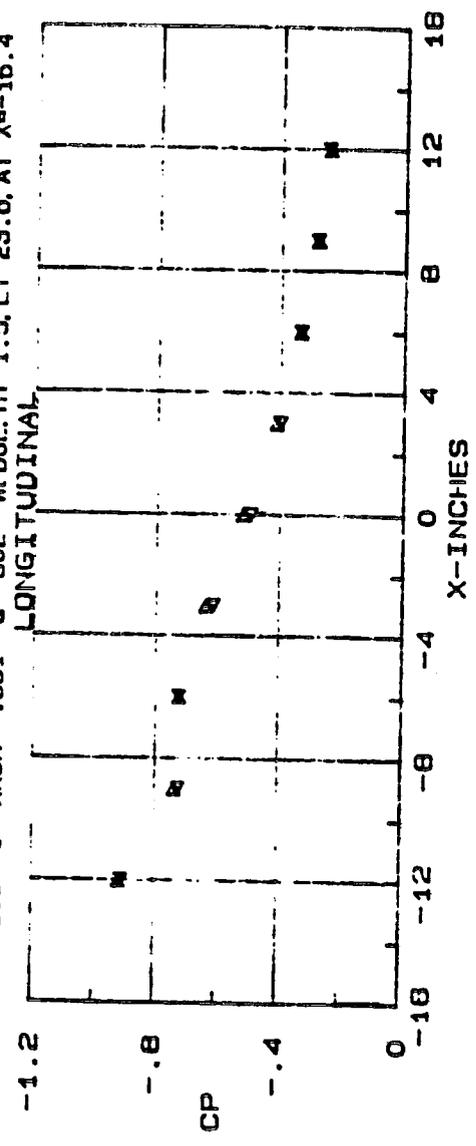
TEST OS-310

ARC 2*2 TUNNEL

PANEL PRESSURE COEFFICIENTS

RUN 105-1 MACH .651 Q= 902 WEDGE: HT 1.5; LT 23.6; AT X=-16.4

SYB Y
 < 10.7
 > -10.7



SYB X
 < -14.8
 > 14.5

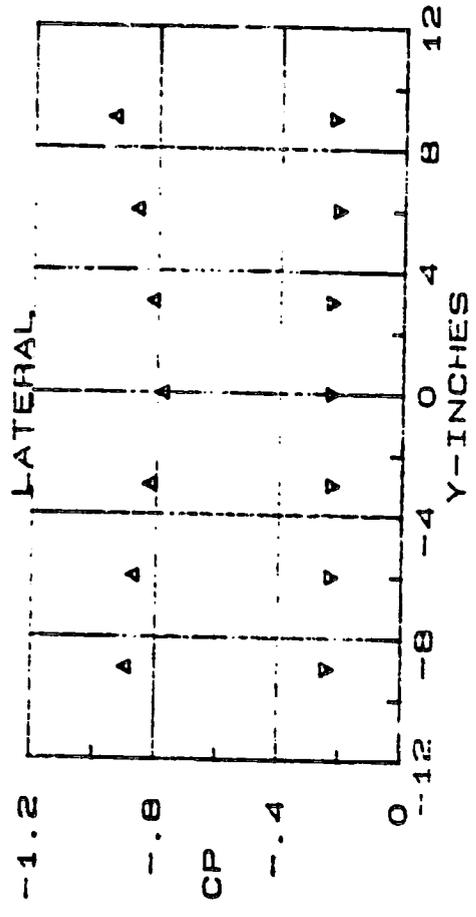


FIGURE 7.E

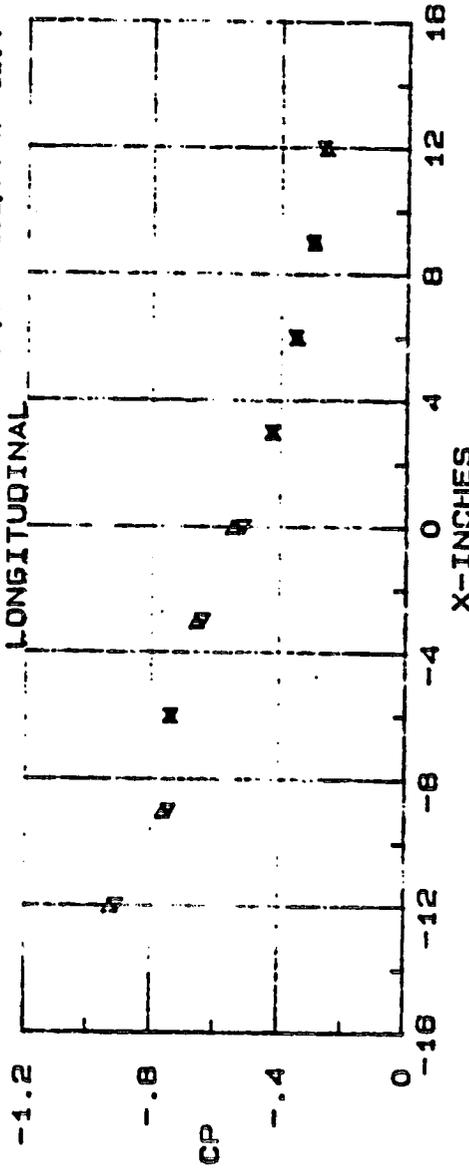
TEST OS-310

ARC 2*2 TUNNEL

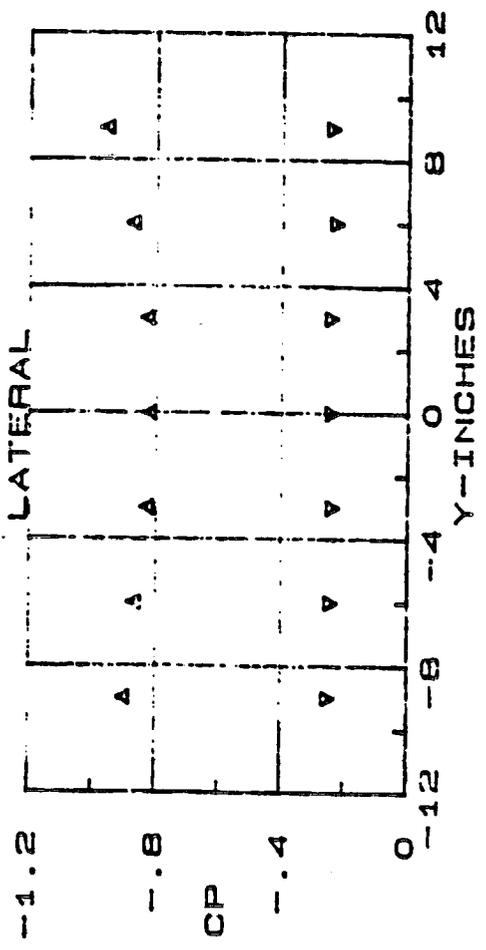
PANEL PRESSURE COEFFICIENTS

RUN 107-1 MACH .652 Q=907 WEDGE: HT 1.5; LT 23.6; AT X=-16.4

LONGITUDINAL



SYB Y
 Δ 40.7
 ▽ -40.7



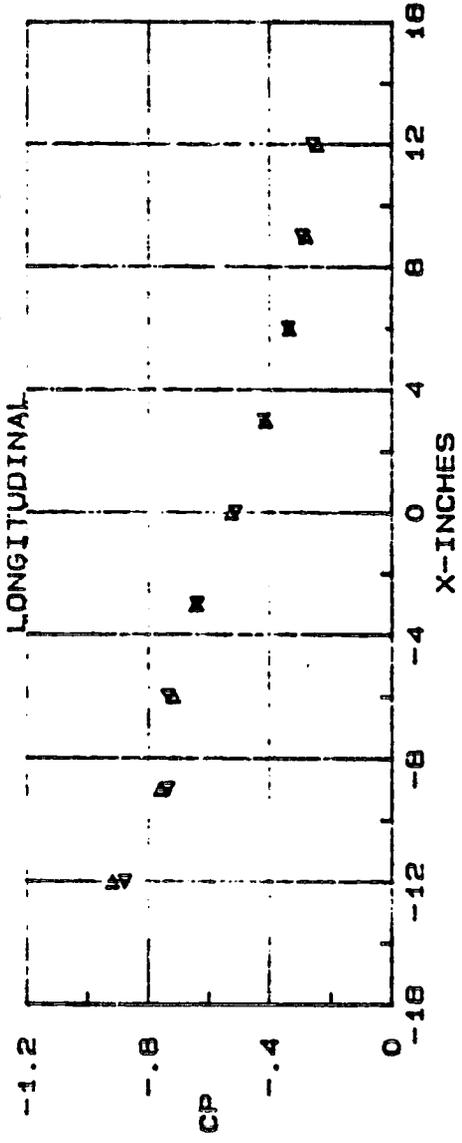
SYB X
 Δ -14.0
 ▽ 14.0

FIGURE 7.F

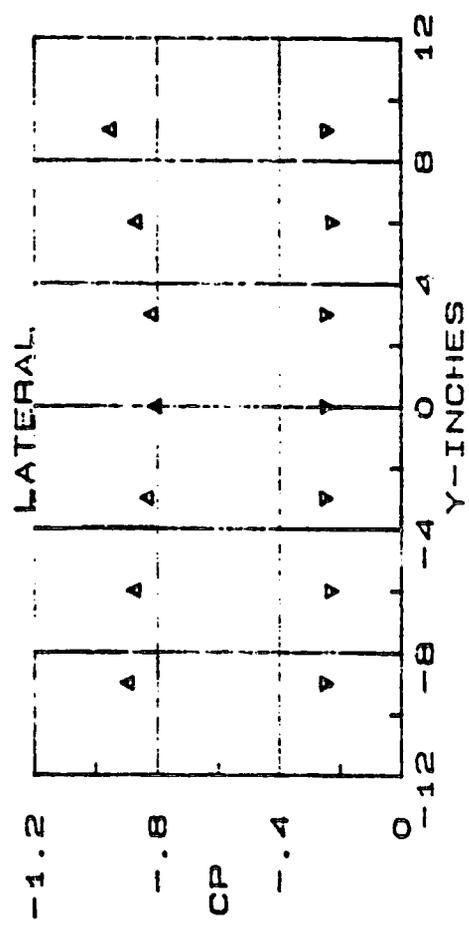
TEST OS-310

PANEL PRESSURE COEFFICIENTS

RUN 106-4 MACH .654 Q=900 WEDGE: HT 1.5; LT 23.6; AT X=-18.4



SYB Y
 ▲ 19.7
 ▼ -19.7



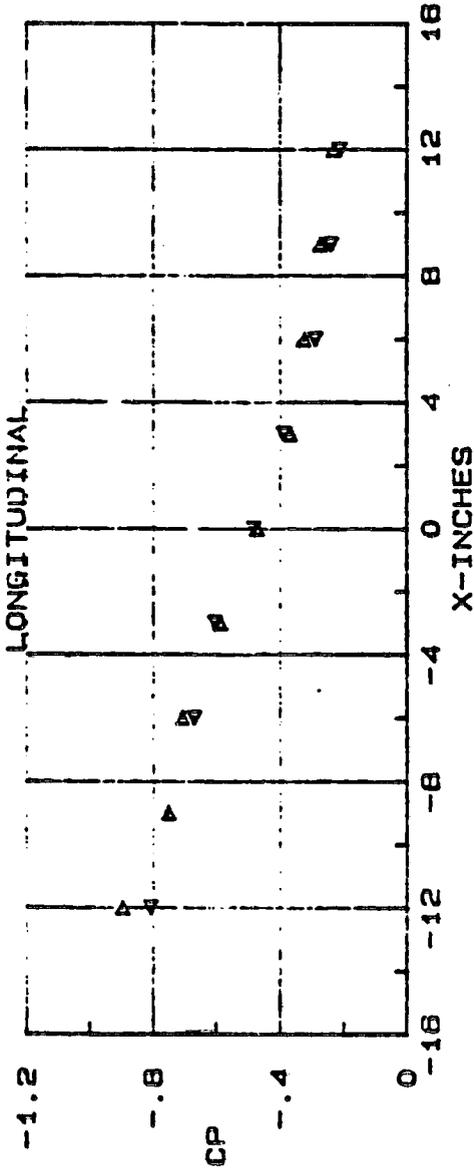
SYB X
 ▲ -14.8
 ▼ 14.8

FIGURE 7.3

TEST OS-310

ARC 2*2 TUNNEL
 PANEL PRESSURE COEFFICIENTS
 RUN 109-17 MACH .850 Q= .651 WEDGE: HT 1.5; LI 23.6; AT X=-16.4

SYB Y
 ◀ 10.7
 ▶ -10.7



SYB X
 ▲ -14.6
 ▼ 14.6

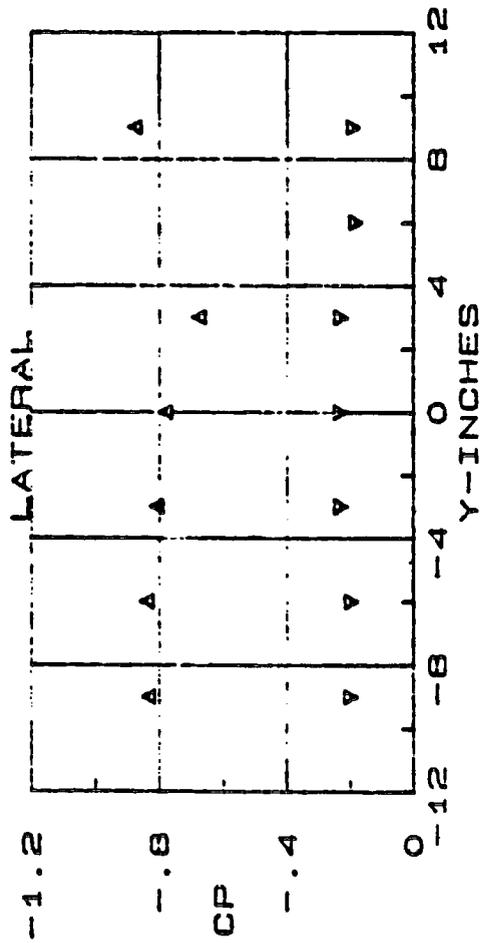
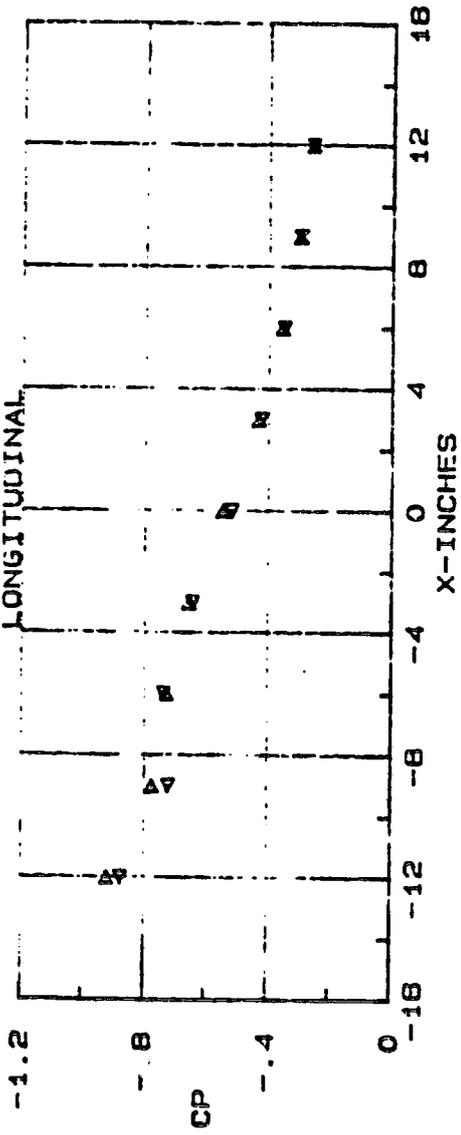


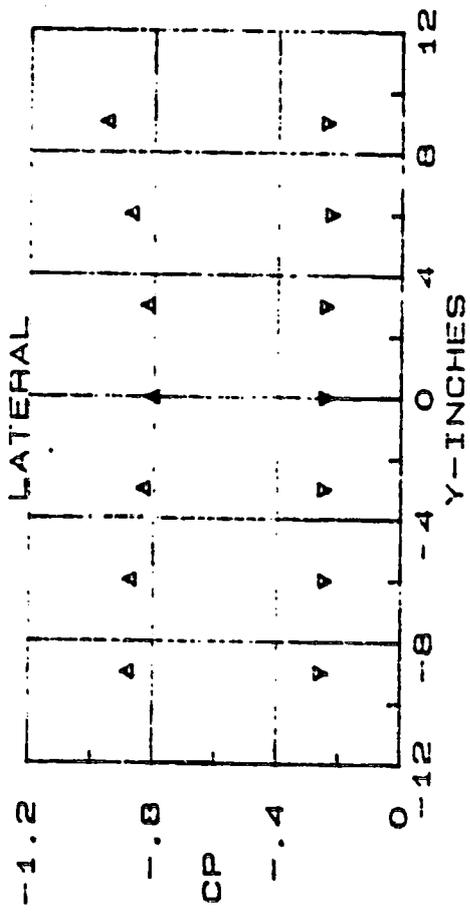
FIGURE 7.H

TEST OS-310

ARC 2x2 TUNNEL
 PANEL PRESSURE COEFFICIENTS
 RUN 110-4 MACH .652 $Q = 904$ WEDGE: HT 1.5; LT 23.6; AT X--18.4



SYB Y
 ◁ 99.7
 ▷ -99.7



SYB X
 ▲ -14.8
 ▼ 14.8

FIGURE 7.1

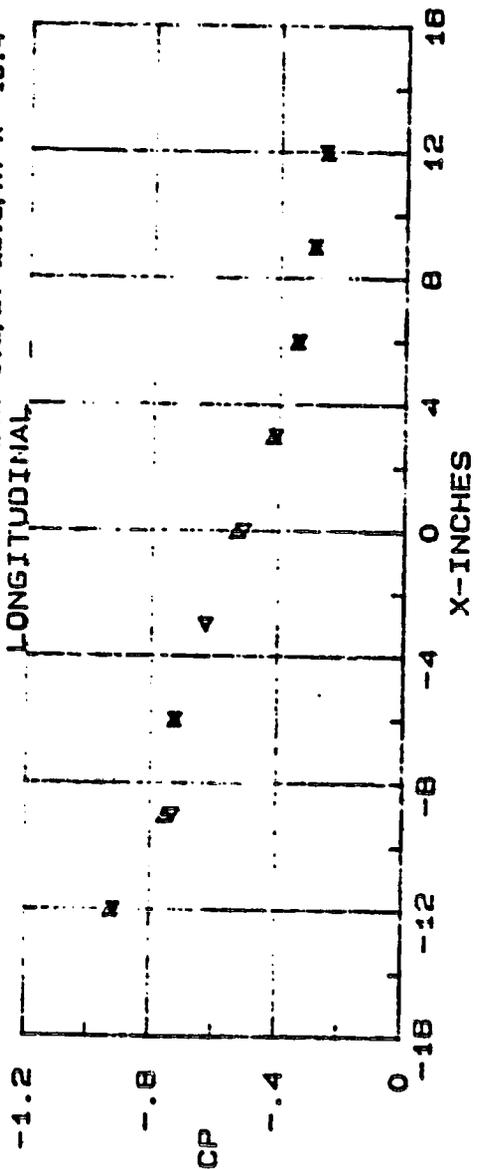
TEST OS-310

ARC 2x2 TUNNEL

PANEL PRESSURE COEFFICIENTS

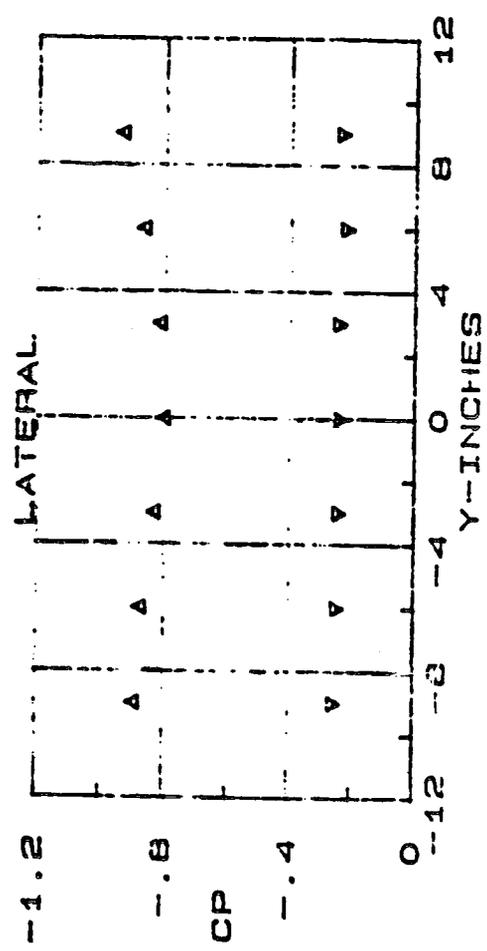
RUN 111-3 MACH .654 Q-909 WEDGE: HT 1.5; LT 23.8; AT X=-16.4

LONGITUDINAL



SYB Y
 ◁ 10.7
 ▷ -10.7

LATERAL



SYB X
 ▲ -14.5
 ▼ 14.5

FIGURE 7.J

TEST OSES-310

ARC 2x2 TUNNEL
 PANEL PRESSURE COEFFICIENTS
 RUN 112-12 MACH .650 Q= 901 WEDGE: HT 1.5; LT 23.8; AT X=-16.4

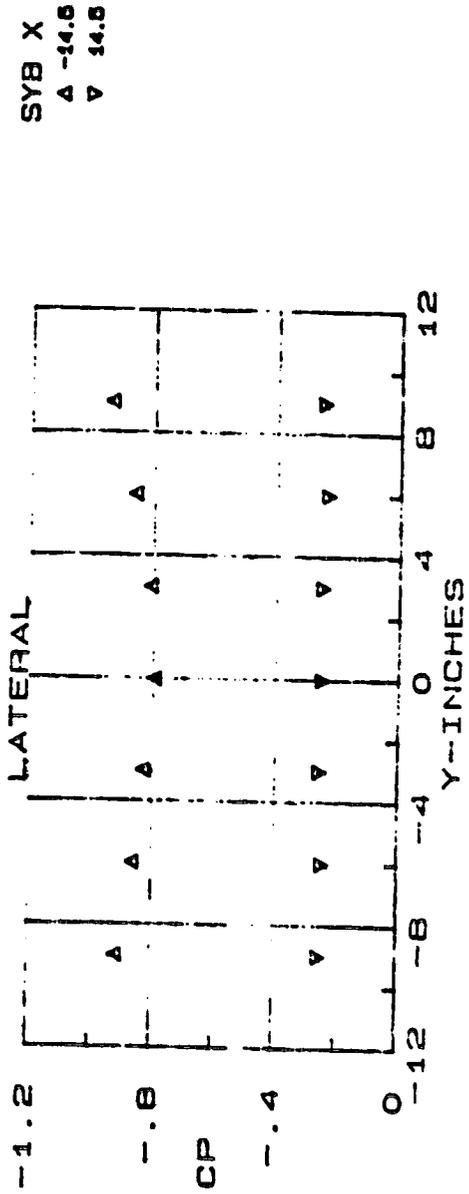
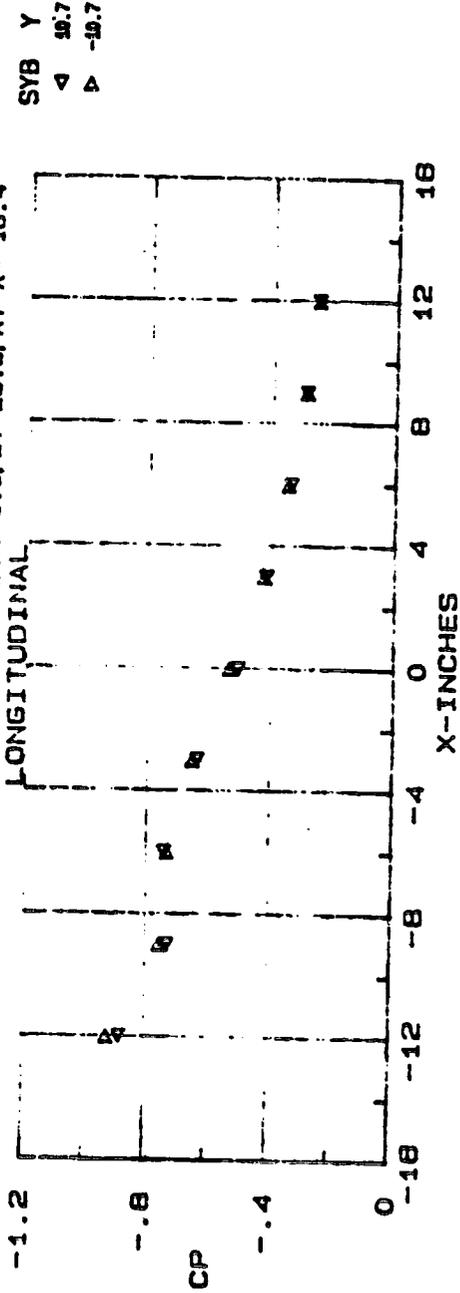
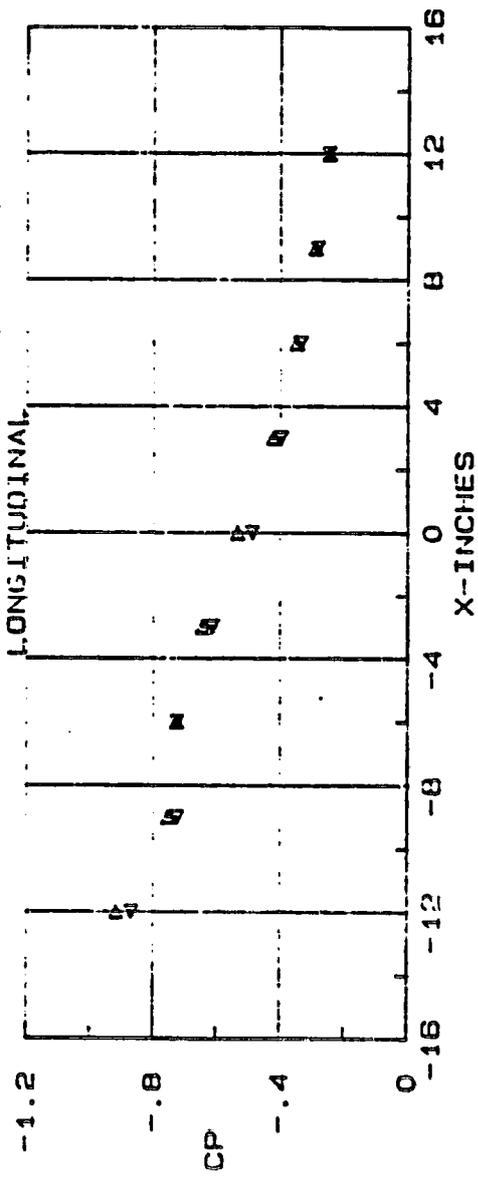


FIGURE 7.K

TLS TOS-310

ARC 2x2 TUNNEL
 PANEL PRESSURE COEFFICIENTS
 RUN 113-10 MACH .651 $\theta = 903$ WEDGE: HT 1.5; LT 23.6; AT X--16.4

SYB Y
 \triangle 10.7
 ∇ -10.7



SYB X
 \triangle -14.5
 ∇ 14.5

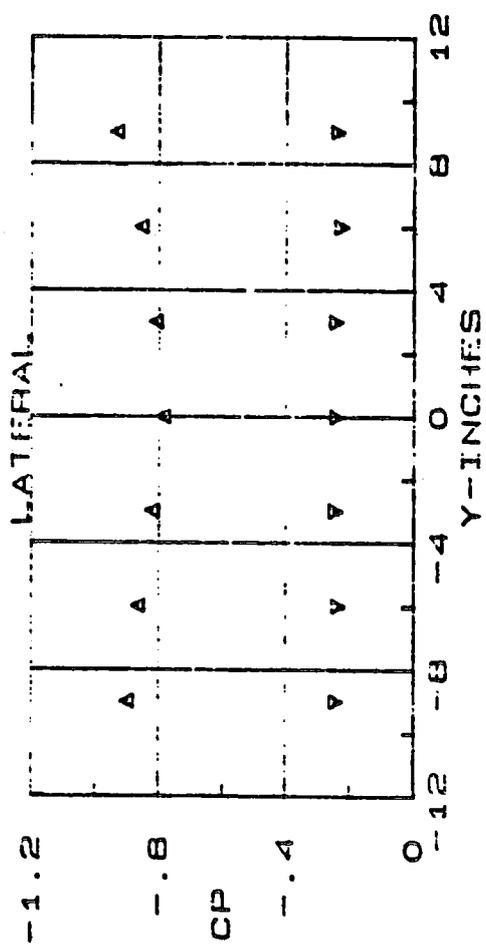
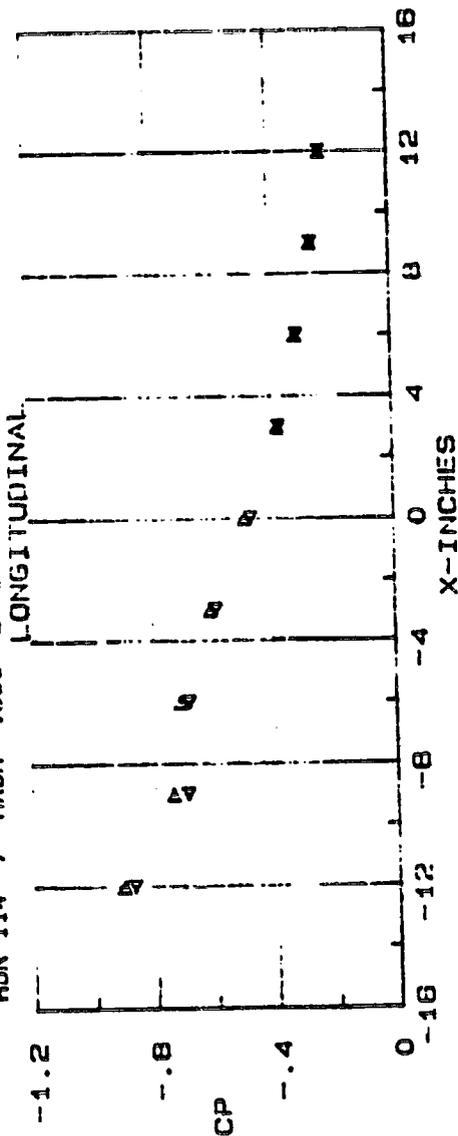


FIGURE 7.L

TEST OS-310

ARC 2*2 TUNNEL
 PANEL PRESSURE COEFFICIENTS
 RUN 114-7 MACH .051 $\theta = 65^\circ$ WEDGE: HT 23.6; AT X=18.4

SYB Y
 \triangle 16.7
 \triangleright -18.7



SYB X
 \triangle -14.5
 \triangleright 14.5

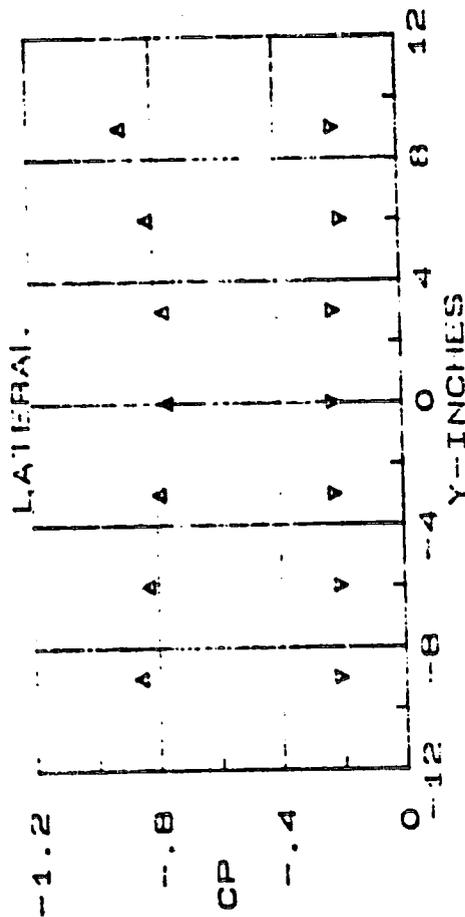
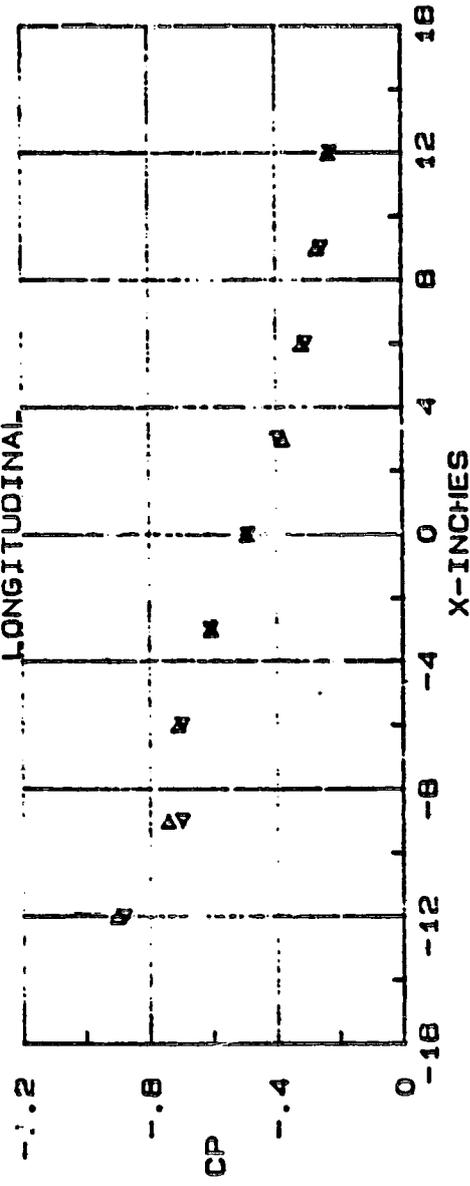


FIGURE 7.M

TEST OS-310

ARC 2*2 TUNNEL
 PANEL. PRESSURE COEFFICIENTS
 RUN 115-6 MACH .652 G-653 WEDGE: HT 1.5; LT 23.6; AT X=-16.4

SYB Y
 ◀ 19.7
 ▶ -19.7



SYB X
 ▲ -14.5
 ▼ 14.5

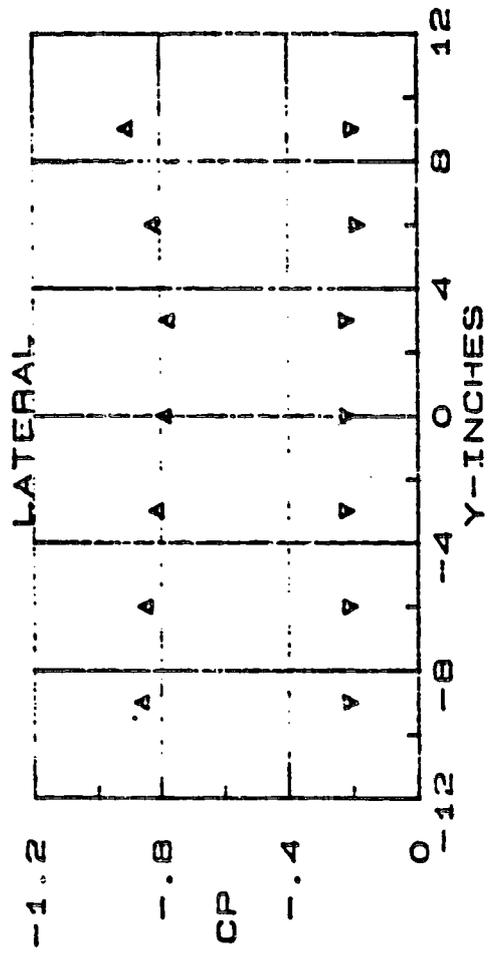


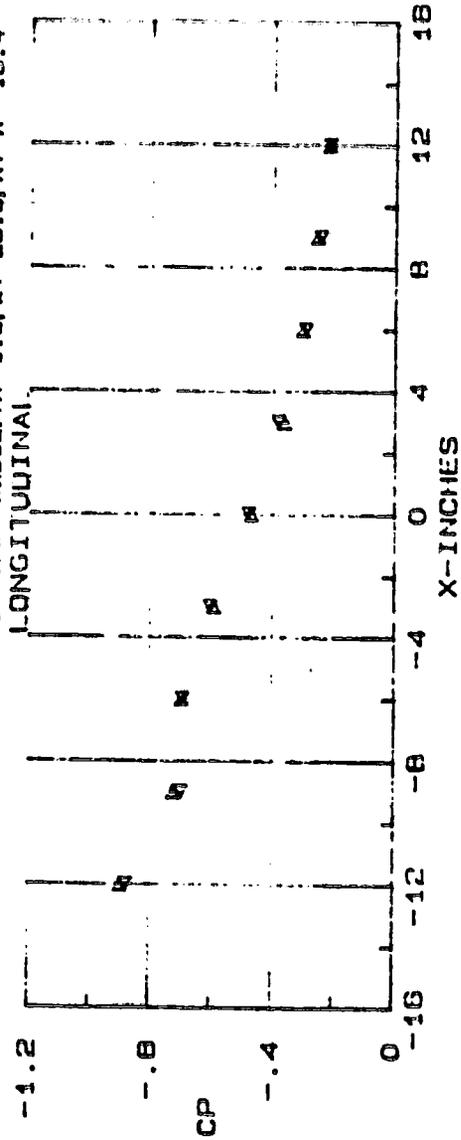
FIGURE 7.N

TEST O S 3 1 0

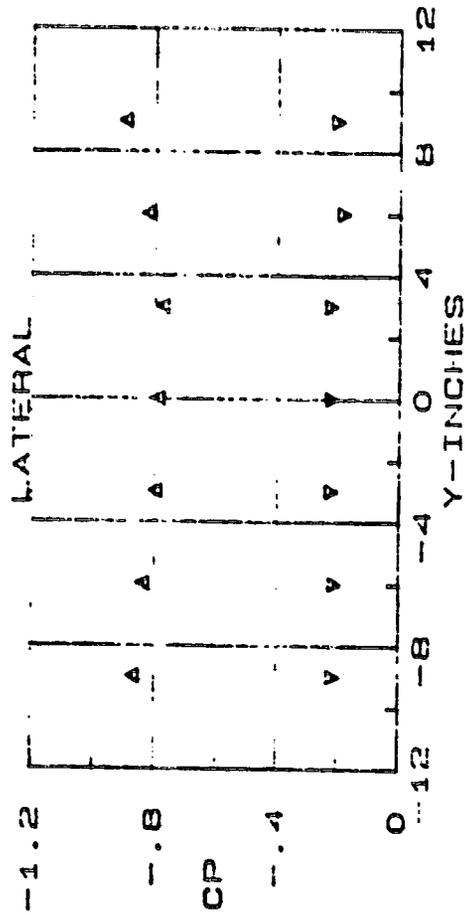
ARC 2*2 TUNNEL

PANEL PRESSURE COEFFICIENTS

RUN 116-2 MACH .652 $\rho = 0.85$ WEDGE: HT 1.5; LT 23.6; AT X=-16.4



SYB Y
 ∇ -16.4
 Δ -0.7



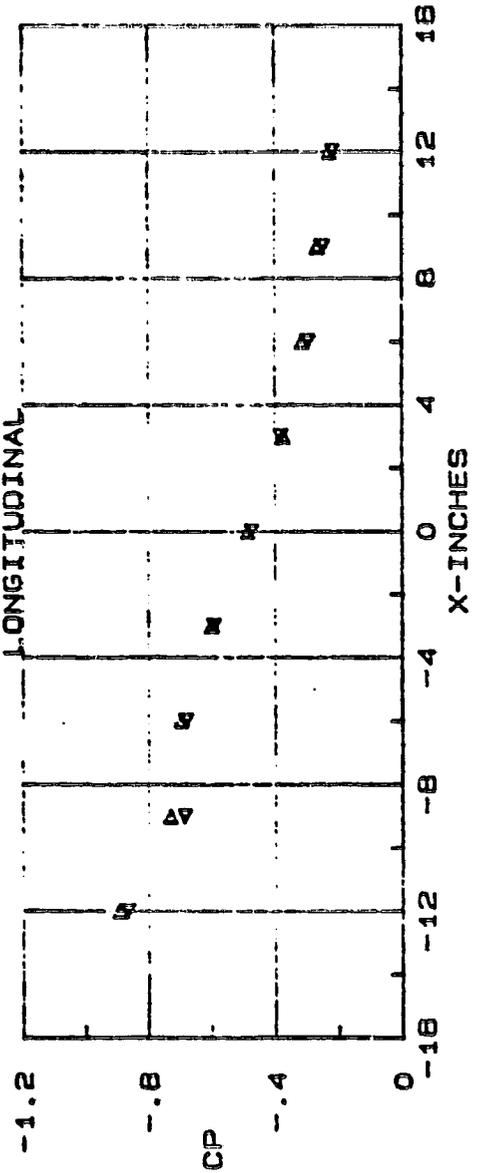
SYB X
 Δ -12.5
 ∇ -14.5

FIGURE 7.0

TEST OS-310

ARC 2*2 TUNNEL
 PANEL PRESSURE COEFFICIENTS
 RUN 117-2 MACH .651 Q= 653 WEDGE: HT 1.5; LT 23.6; AT X=-18.4

SYB Y
 < 10.7
 > -10.7



SYB X
 Δ -14.5
 ▽ 14.5

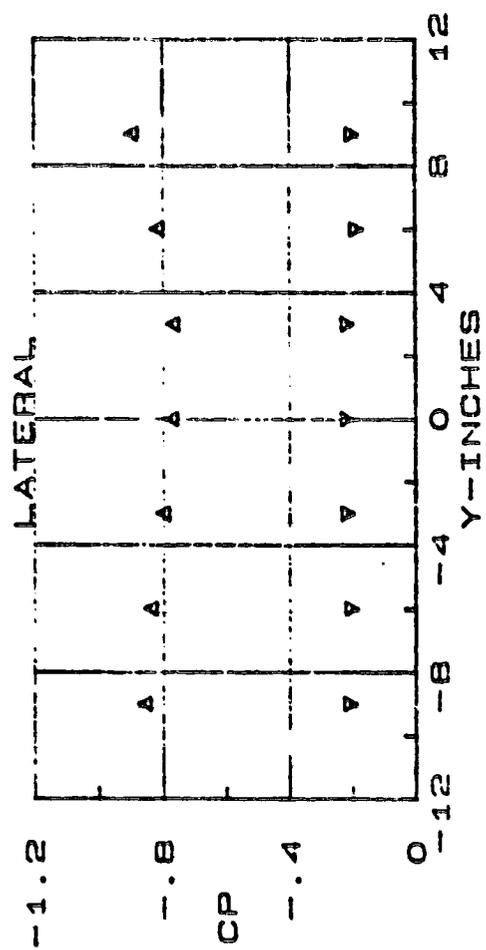
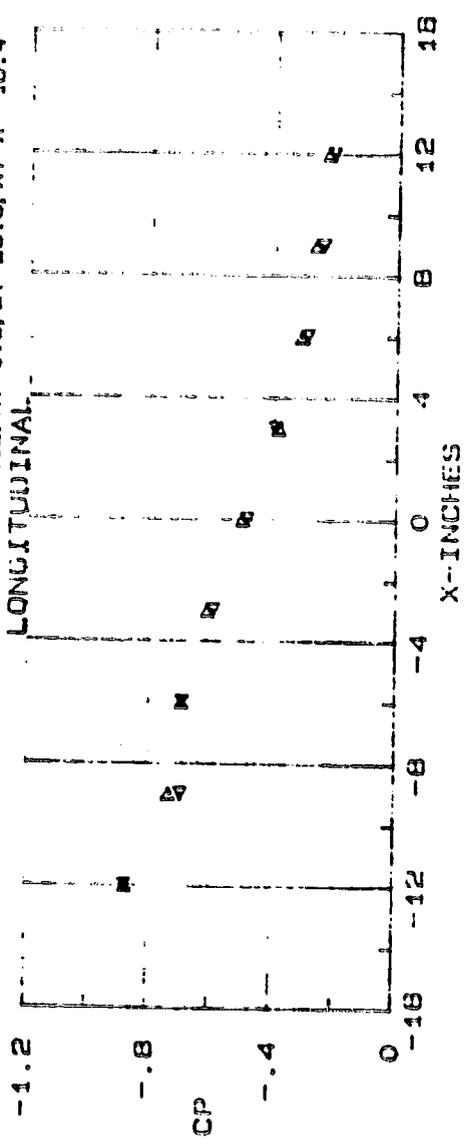


FIGURE 7.P

TEST OS-310

ARC 2x2 TUNNEL
 PANEL PRESSURE COEFFICIENTS
 RUN 116-2 MACH .654 Q=659 WEDGE:WT 1.5;LT 23.6;AT X=-16.4

SYB Y
 ◁ 19.7
 ▷ -19.7



SYB X
 ▲ -14.5
 ▼ 14.5

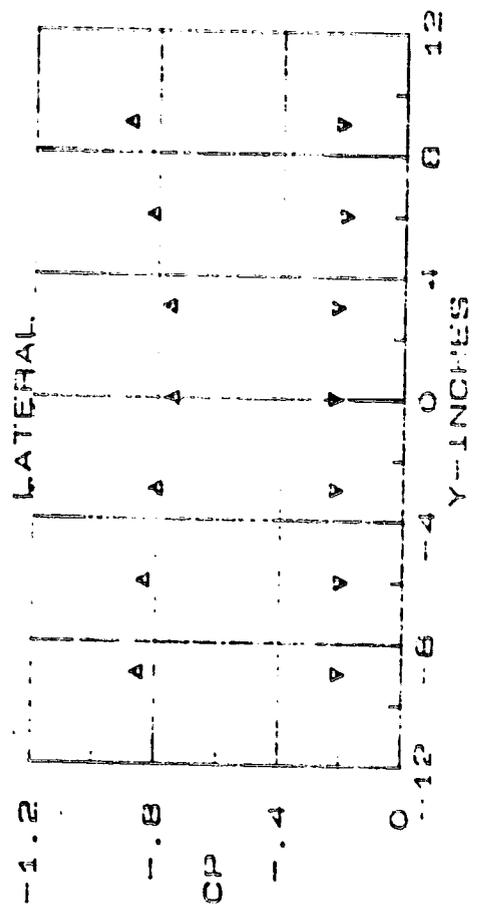
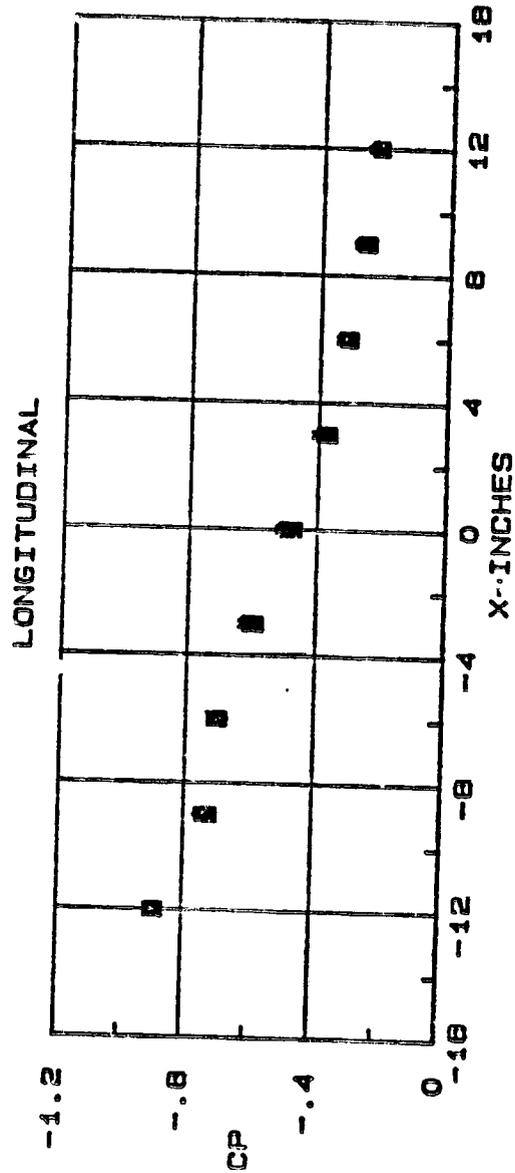


FIGURE 7.Q

TEST OS-310

ARC 2*2 TUNNEL

PANEL PRESSURE COEFFICIENTS



SYB	RUN	SEQ	MACH	Q	WEDGE	HT	LGT	X-STA
□	079	- 01	0.853	0841	1.5	29.80	-18.4	
x	100	- 10	0.852	0854	1.5	29.80	-18.4	
△	109	- 17	0.850	0851	1.5	29.80	-18.4	
+	114	- 07	0.851	0852	1.5	29.80	-18.4	
v	116	- 08	0.852	0853	1.5	29.80	-18.4	
•	116	- 02	0.852	0853	1.5	29.80	-18.4	
∇	117	- 02	0.851	0853	1.5	29.80	-18.4	
∩	118	- 02	0.854	0858	1.5	29.80	-18.4	

FIGURE 3.A

TEST O S - 3 1 0

ARC 2*2 TUNNEL
 PANEL PRESSURE COEFFICIENTS

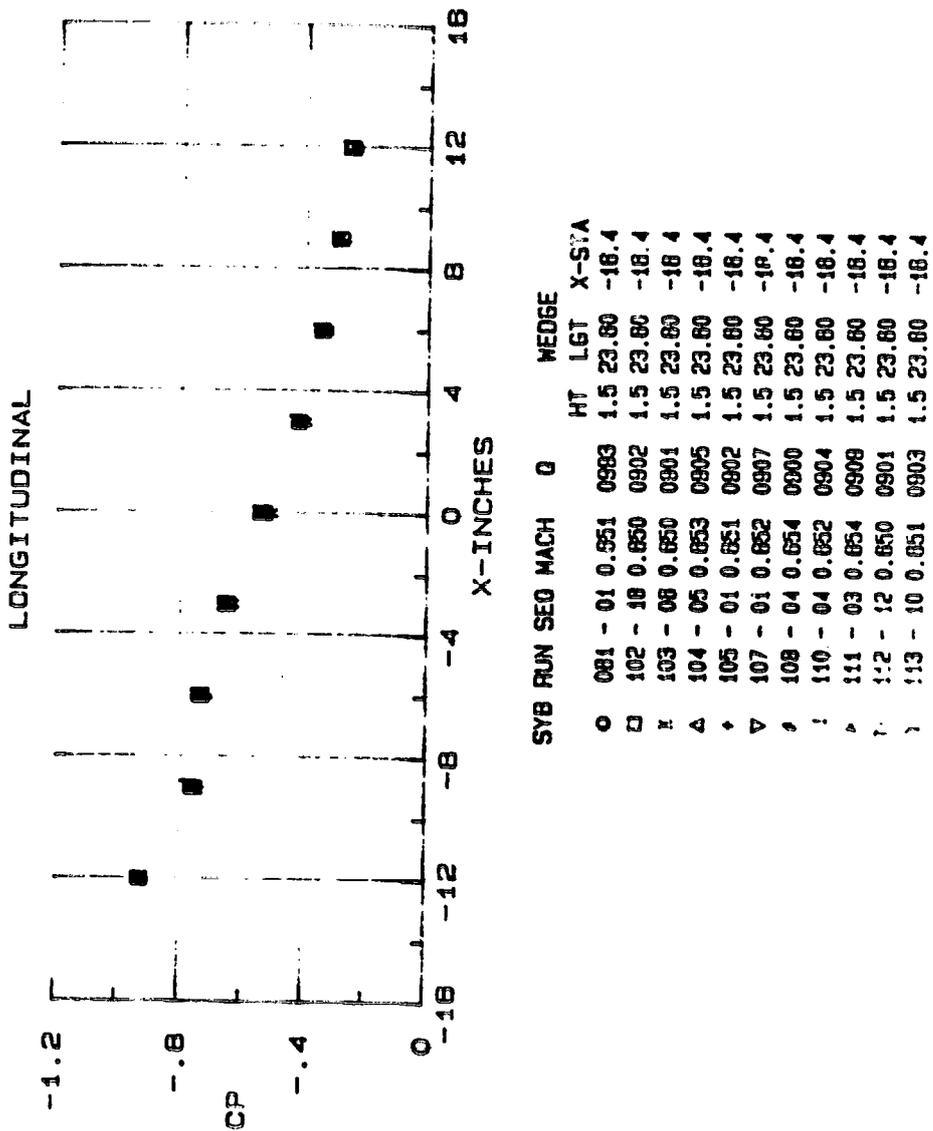
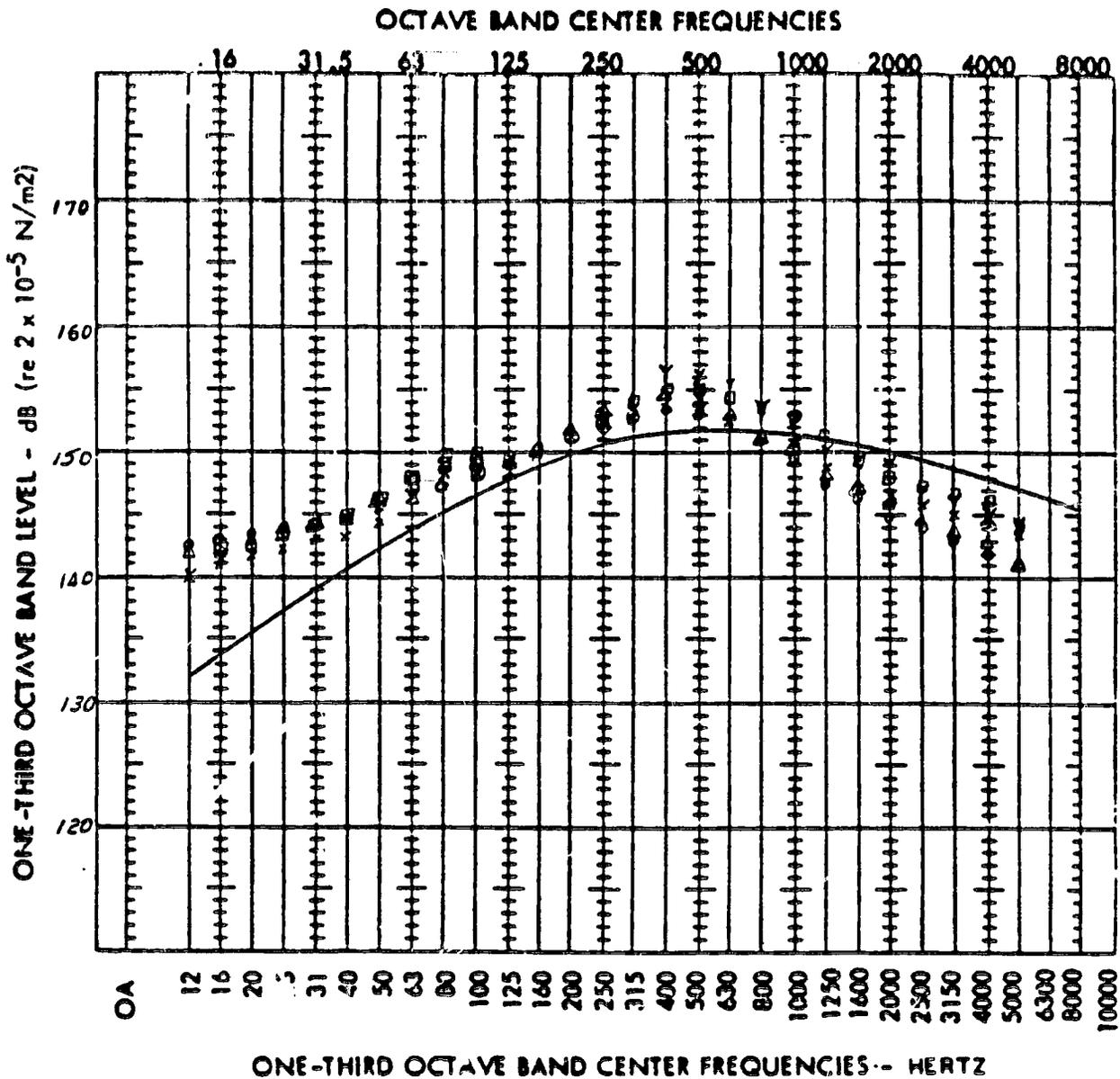


FIGURE 8.B

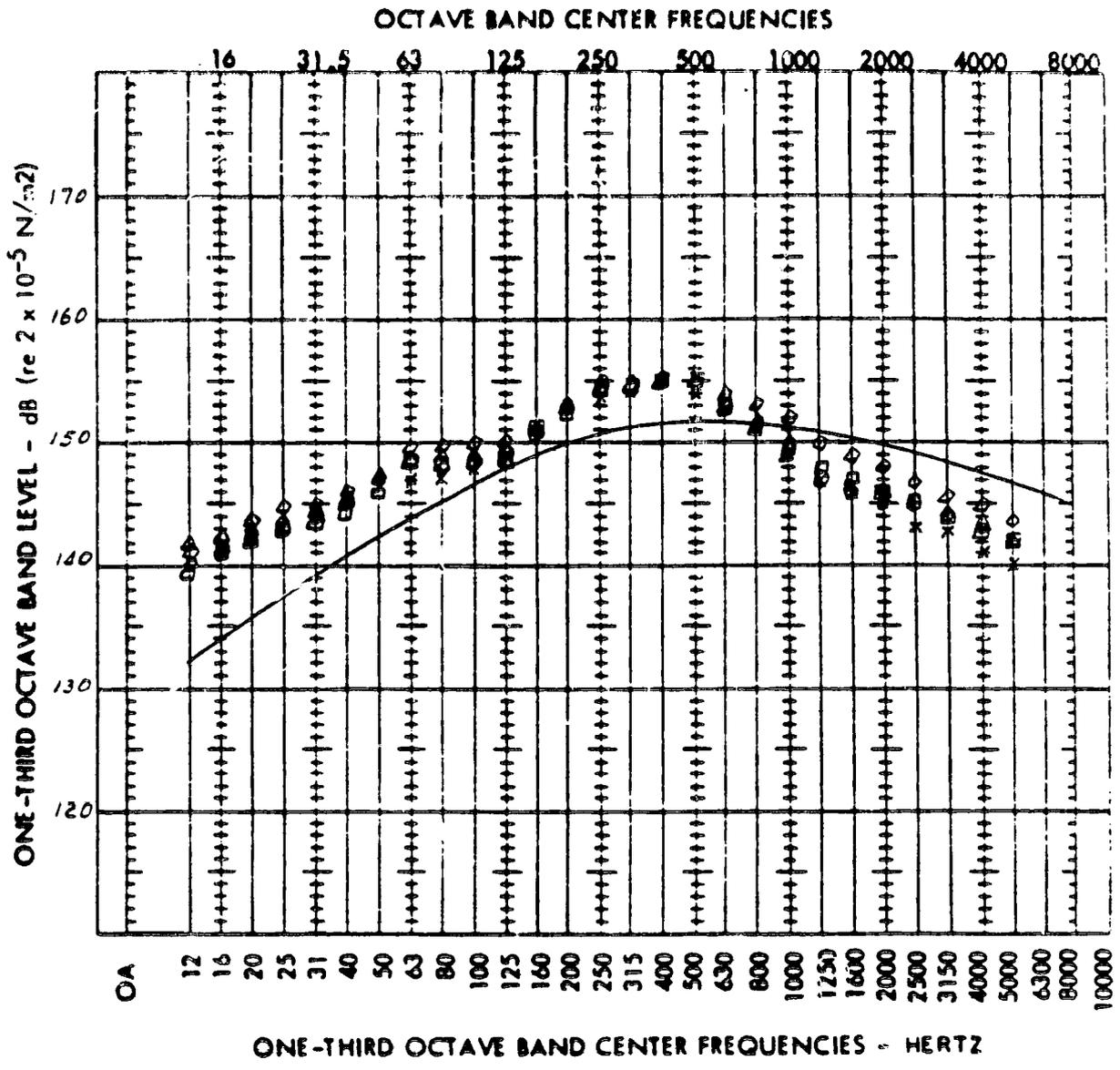


- KULITE**
- X - No. 1
 - O - No. 3
 - Δ - No. 5
 - - No. 6
 - Y - No. 7

$Q = 640$ PSF
 MAGN = 0.65

— PREDICTED LEVEL FOR CANOPY TOP (NOMINAL)
 FROM SD-74-SH-0082A

FIGURE 9.A



ONE-THIRD OCTAVE BAND LEVEL - dB (re 2×10^{-5} N/m²)

- KULITE**
- ∴ - No. 9
 - - No. 10
 - △ - No. 11
 - - No. 12
 - Y - No. 15
 - ◇ - No. 18

$Q = 640$ PSF
 $MACH = 0.65$

— PREDICTED LEVEL FOR CANOPY TOP (NOMINAL)
 FROM SD-74-SN-0082A

FIGURE 9.P

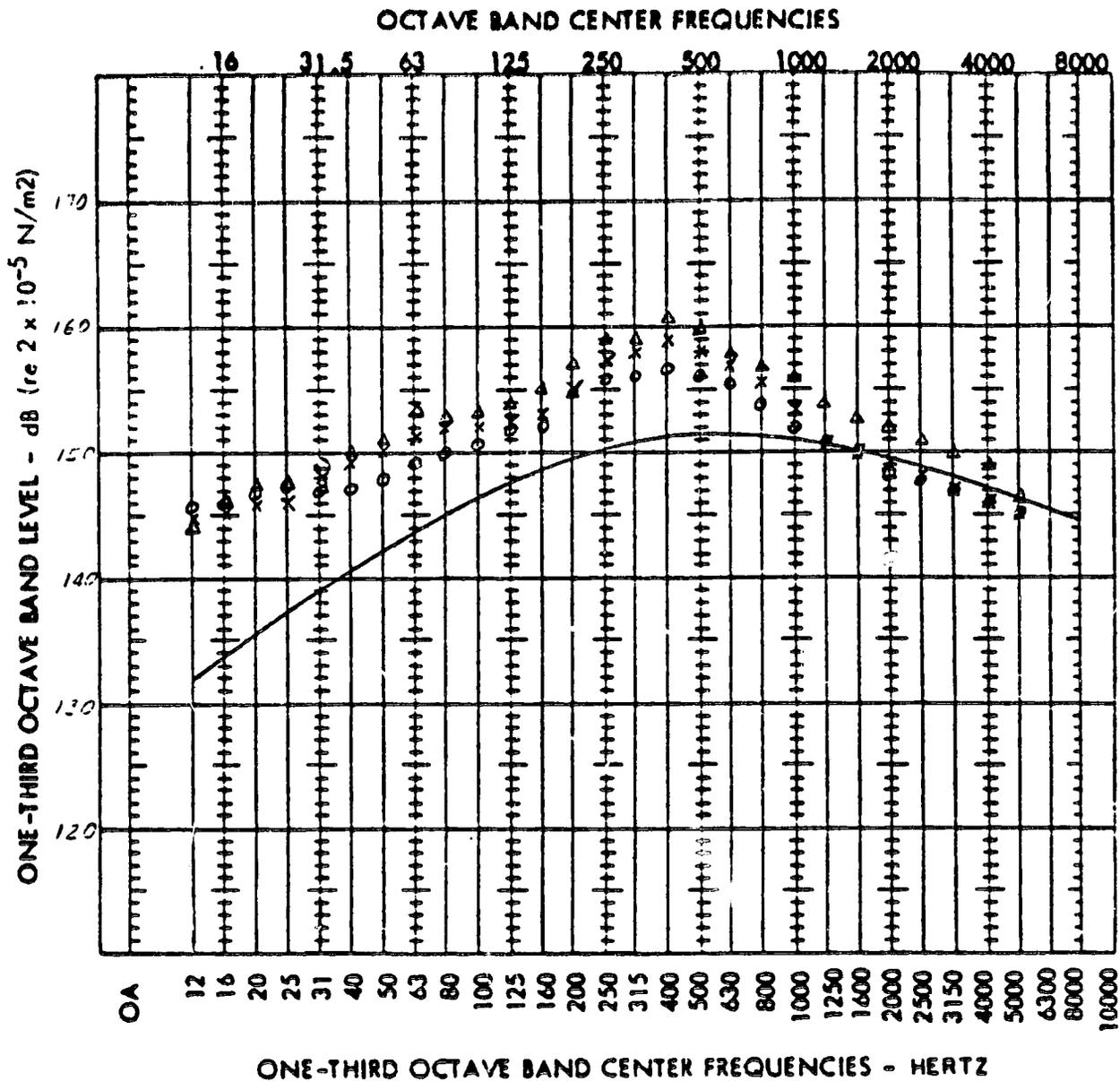
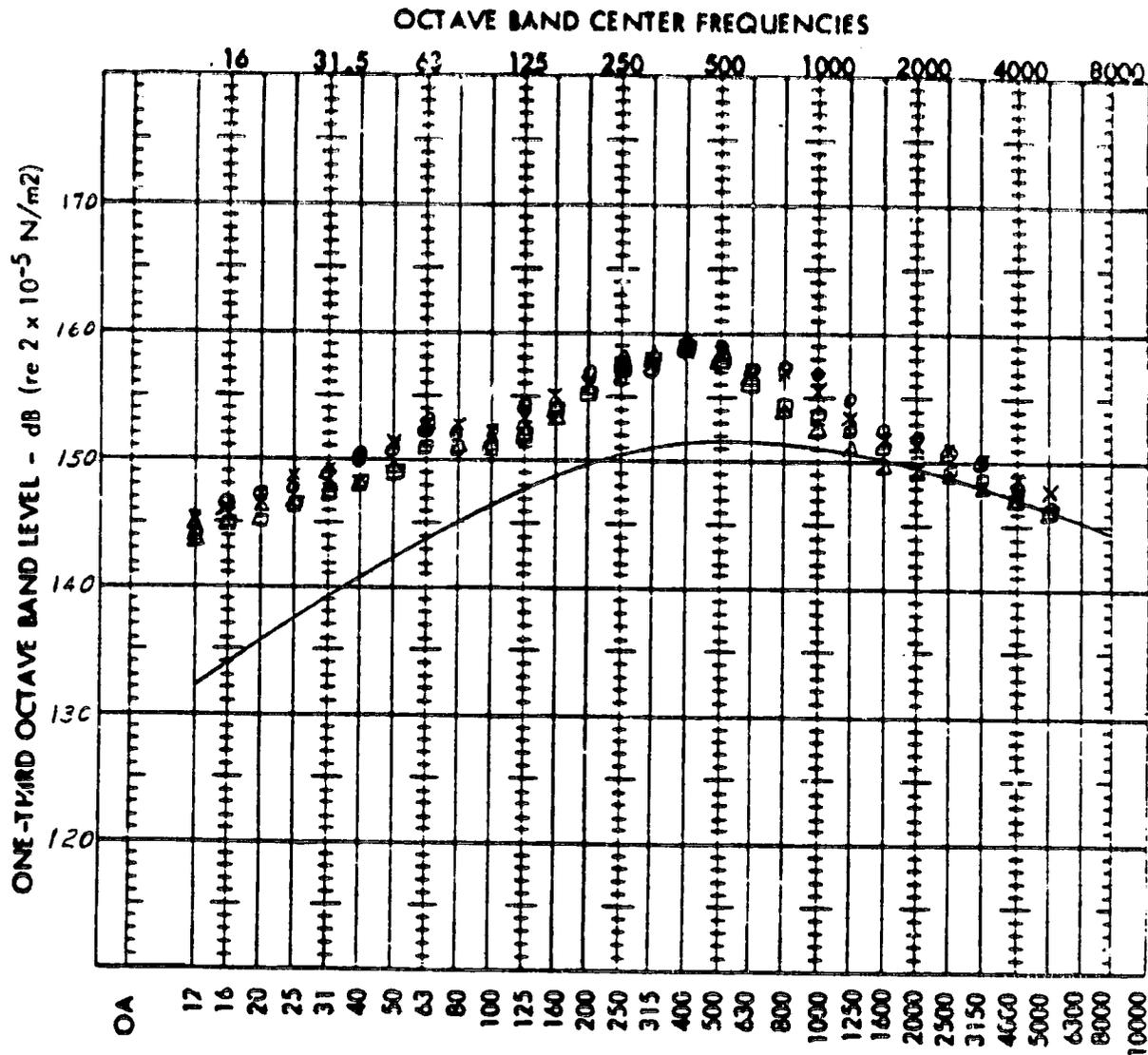


FIGURE 10.A



- △ - No. 10
- - No. 11
- x - No. 15
- o - No. 21

Q = 990 PSF
MACH = 0.65

— PREDICTED LEVEL FOR CANOPY TOP (NOMINAL)
FROM SD-74-SH-0082A

FIGURE 10.B



APPENDIX A

Time-Averaged Pressure Coefficient Tabulated Data

	<u>Page</u>
OIL FLOW RUNS	88
CALIBRATION RUNS	95
DATA RUNS	99

TEST OS-310

DATA SHEET IDENTIFICATION

RUN: SEG
XXX: XXX

MACH PT P Q RN TTF RO HW CONF TIME
XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX

W01 W02 W03 W04 W05 W06 W07 W08 W09 W10 W11 W12 W13 W14 W15 W16 W17
XXX XXX

W18 W19 W20 W21 W22 W23 W24 W25 W26 W27 W28 W29 W30 W31 W32 W33 W34 W35 W36 W37
XXX XXX

W43 W44 W45 W46 W47 W53 W54 W55 W56 W57 W63 W64 W65 W66 W67
XXX XXX

1157-560 PA-1 TA-22 4036	10-PRESSOUTS	10 JAN 0321743	PAGE 0
02 17 77 100 TRANSPIU POUJ3 TAPE-WANDI9			
1151-560 PA-1 TA-22 4036	10-PRESSOUTS	10 JAN 0321743	PAGE 1
0	4036		
0 0.750 2332.3 1468.8 577.7 3.575 85.0 0.001748 0.069 / 0.937			
-1.424 -1.161 -1.019 -0.896 -0.820 -0.807 -0.798 -0.941 -0.869 -1.352 -1.216 -1.045 -0.890 -0.877 -0.800 -0.835			
-0.870 -0.655 -1.400 -1.524 -1.508 -1.557 -1.560 -1.565 -1.537 1.069 0.448 0.525 1.078 -0.976 0.588 0.774			
0 NUM:5EC			
4037			
0 0.751 2126.4 1473.5 580.4 3.904 94.3 0.001722 0.066 / 0.942			
-1.465 -1.180 -1.021 -0.895 -0.822 -0.820 -0.811 -0.852 -0.873 -1.558 -1.218 -1.043 -0.895 -0.894 -0.818 0.249			
-0.871 -0.650 -1.400 -1.532 -1.518 -1.565 -1.574 -1.572 -1.541 1.033 0.423 0.517 1.063 -0.978 0.515 0.789			
0 NUM:5EC			
4038			
0 0.752 2141.2 1473.7 581.0 3.866 99.1 0.001710 0.069 / 0.947			
-1.455 -1.186 -1.029 -0.906 -0.845 -0.828 -0.820 -0.844 -0.889 -1.572 -1.232 -1.053 -0.899 -0.900 -0.823 -0.863			
-0.868 -0.641 -1.447 -1.545 -1.526 -1.576 -1.592 -1.576 -1.552 1.002 0.400 0.511 1.051 -0.987 0.549 0.805			
0 NUM:5EC			
4039			
0 0.753 2160.1 1471.7 581.6 3.831 103.1 0.001696 0.073 / 0.951			
-1.451 -1.185 -1.021 -0.902 -0.846 -0.832 -0.820 -0.843 -0.887 -1.575 -1.234 -1.054 -0.901 -0.898 -0.826 -0.865			
-0.890 -0.640 -1.442 -1.545 -1.525 -1.575 -1.578 -1.582 -1.548 0.971 0.377 0.506 1.040 -0.990 0.397 0.822			
0 NUM:5EC			
4040			
0 0.754 2195.5 1412.2 619.9 4.123 82.6 0.001708 0.097 / 0.116			
-0.872 -0.670 -0.641 -0.531 -0.504 -0.482 -0.456 -0.446 -0.449 -0.908 -0.807 -0.697 -0.560 -0.521 -0.462 -0.453			
-0.444 -0.432 -1.075 -0.472 -0.420 -0.427 -0.429 -0.487 -1.001 0.824 0.321 0.493 0.958 -0.378 -0.428 0.850			
0 NUM:5EC			
4112			
0 0.757 2854.2 1486.9 667.6 4.291 113.8 0.001908 0.070 / 0.1000			
-1.488 -1.213 -1.048 -0.914 -0.823 -0.844 -0.851 -0.909 -0.934 -1.595 -1.249 -1.073 -0.927 -0.926 -0.847 -0.883			
-0.824 -0.543 -1.642 -1.573 -1.528 -1.589 -1.596 -1.603 -1.578 0.475 -0.928 0.112 0.557 -1.011 -1.018 0.420			
0 NUM:5EC			
4113			
0 0.758 2853.5 1488.2 667.5 4.278 115.2 0.001905 0.067 / 0.1004			
-1.489 -1.212 -1.046 -0.916 -0.855 -0.844 -0.852 -0.905 -0.929 -1.589 -1.244 -1.077 -0.926 -0.922 -0.845 -0.885			
-0.810 -0.521 -1.631 -1.574 -1.520 -1.591 -1.604 -1.602 -1.576 0.443 -0.911 0.102 0.553 -1.013 -1.026 0.424			

0	0.757	2453.2	1709.7	664.5	4.409	110.5	0.001942	0.035	0	1344	-1.373	-1.095	-0.975	-0.862	-0.825
	-0.216	-1.548	-1.117	-0.952	-0.854	-0.796	-0.010	-0.026		-0.262	0.377	-0.906	-0.947	0.315	
	-0.438	0.468	0.477	0.427	0.439	0.462	0.428	0.458		0.242	0.030				
0	RUN:SEC														
	5432														
0	0.313	2146.1	2005.4	137.4	2.094	71.1	0.002245	0.066	0	1449	-0.203	-0.097	-0.108	-0.029	-0.014
	-0.510	-0.318	-0.193	-0.125	-0.071	-0.036	-0.027	-0.026		-0.553	-0.363	-0.369	-0.028	-0.031	-0.613
	-0.997	-0.904	-0.629	-0.409	-0.221	-0.170	-0.122	-0.154		-0.997	-2.567	-2.034	-0.028	-0.031	-0.613
1757-560 FH-1 TA-22	5433	10-PRESSOUTS													
0	RUN:SEC														
	5432														
0	0.314	2144.8	2002.9	138.4	2.102	70.9	0.002243	0.077	0	1450	-0.183	-0.059	-0.102	-0.032	-0.018
	-0.450	-0.251	-0.166	-0.095	-0.042	-0.010	-0.014	-0.012		-0.539	-0.334	-0.190	-0.023	-0.013	-0.601
	-0.911	-0.610	-0.415	-0.263	-0.121	-0.073	-0.067	-0.054		-0.969	-2.494	-1.990	-0.023	-0.013	-0.601
0	RUN:SEC														
	5511														
0	0.405	2144.4	1911.4	223.5	2.656	70.7	0.002170	0.060	0	1455	-0.142	-0.138	-0.069	-0.042	
	-0.545	-0.367	-0.231	-0.164	-0.104	-0.062	-0.050	-0.044		-0.595	-0.421	-0.259	-0.054	-0.026	0.002
	-0.934	-0.621	-0.459	-0.270	-0.150	-0.095	-0.076	-0.058		-0.923	-1.146	-0.839	-0.054	-0.026	0.002
0	RUN:SEC														
	5512														
0	0.410	2145.7	1911.5	224.0	2.664	70.5	0.002172	0.071	0	1455	-0.237	-0.133	-0.131	-0.034	-0.037
	-0.525	-0.344	-0.216	-0.150	-0.095	-0.054	-0.036	-0.030		-0.571	-0.393	-0.237	-0.034	-0.056	-0.037
	-0.925	-0.626	-0.472	-0.281	-0.161	-0.104	-0.080	-0.061		-0.923	-1.132	-0.834	-0.056	-0.067	-0.034
0	RUN:SEC														
	5511														
0	0.410	2145.7	1910.8	223.2	2.668	70.5	0.002171	0.071	0	1456	-0.233	-0.139	-0.139	-0.039	-0.040
	-0.518	-0.344	-0.216	-0.150	-0.092	-0.052	-0.032	-0.030		-0.569	-0.385	-0.233	-0.039	-0.059	-0.040
	-0.932	-0.630	-0.473	-0.281	-0.161	-0.104	-0.080	-0.060		-0.923	-1.118	-0.829	-0.036	-0.059	-0.040
1757-560 FH-1 TA-22	5611	10-PRESSOUTS													
0	RUN:SEC														
	5611														
0	0.508	2146.2	1799.9	324.8	3.168	71.9	0.002075	0.065	0	1501	-0.292	-0.181	-0.177	-0.037	-0.067
	-0.546	-0.401	-0.257	-0.173	-0.110	-0.086	-0.063	-0.051		-0.437	-0.437	-0.292	-0.077	-0.084	0.311
	-0.916	-0.652	-0.452	-0.287	-0.162	-0.104	-0.076	-0.066		-0.843	-0.452	-0.252	-0.077	-0.084	0.311
0	RUN:SEC														
	5612														
0	0.508	2147.1	1800.2	325.3	3.171	71.9	0.002075	0.059	0	1501	-0.179	-0.179	-0.170	-0.088	-0.065
	-0.563	-0.404	-0.249	-0.190	-0.134	-0.087	-0.063	-0.056		-0.612	-0.440	-0.293	-0.077	-0.088	-0.065
	-0.914	-0.651	-0.452	-0.287	-0.162	-0.104	-0.076	-0.066		-0.843	-0.452	-0.252	-0.077	-0.088	-0.065

0	0.774	2143.7	1446.5	3969	96.2	0.501698	0.068	0	1521	-0.919	-0.793	-0.873	-0.739	-0.797
	-1.140	-1.065	-0.879	-0.012	-0.757	-0.758	-0.840		-1.346	-1.036	0.697	-0.853	-0.944	0.697
	-0.815	-0.854	-1.454	-1.406	-1.445	-1.435	-1.408		0.474	0.209	0.370	-0.255	-0.944	0.697
0	SUM:SEC													
	5822	2148.0	1446.6	3961	97.2	0.001695	0.067	0	1522	-0.921	-0.793	-0.877	-0.749	-0.814
	-1.125	-1.064	-0.901	-0.698	-0.760	-0.790	-0.832		-1.345	-1.041	0.354	-0.667	-0.943	0.693
	-0.833	-0.864	-1.452	-1.406	-1.447	-1.439	-1.406		0.440	0.180	0.354	-0.256	-0.943	0.693
0	SUM:SEC													
	5811	2023.4	709.2	5.033	90.4	0.002358	0.085	0	1523	-0.545	-0.403	-0.375	-0.251	-0.221
	-0.708	-0.683	-0.475	-0.290	-0.246	-0.211	-0.190		-0.239	-0.674	-0.503	-0.207	-0.159	-0.201
	-0.103	-0.174	-0.146	-0.872	-0.835	-0.807	-0.857		-0.437	-0.655	-0.503	-0.207	-0.159	-0.201
	INST-560 PM-1 IN-22 41:11													
	10-PRESSUITS													
0	SUM:SEC													
	6121	2103.7	2293.6	700.4	5.622	0.002463	0.031	0	1528	-0.867	-0.705	-0.401	-0.283	-0.250
	-0.810	-0.712	-0.511	-0.421	-0.376	-0.316	-0.213		-0.867	-0.705	-0.570	-0.226	-0.243	-0.521
	-0.122	-0.304	-0.322	-0.940	-0.898	-0.865	-0.891		-0.736	-0.928	-0.791	-0.536	-0.226	-0.521
0	SUM:SEC													
	6211	3523.2	2440.9	682.3	6.227	0.002938	0.048	0	1532	-0.864	-0.438	-0.406	-0.250	-0.251
	-0.704	-0.725	-0.522	-0.429	-0.386	-0.225	-0.215		-0.862	-0.694	-0.564	-0.228	-0.241	-0.740
	-0.222	-0.204	-0.531	-0.932	-0.898	-0.862	-0.917		-0.921	-1.092	-0.980	-0.228	-0.241	-0.740
0	SUM:SEC													
	6411	425.9	425.9	3.677	60.3	0.001993	0.055	0	934	-0.588	-0.303	-0.394	-0.290	-0.231
	-0.711	-0.553	-0.590	-0.489	-0.366	-0.219	-0.178		-0.771	-0.621	0.519	-0.173	-0.140	0.693
	-0.184	-0.161	-0.810	-0.732	-0.679	-0.643	-0.724		0.517	0.449	0.519	-0.173	-0.140	0.693
0	SUM:SEC													
	6511	2138.0	1665.9	477.6	3.675	0.001999	0.070	0	936	-0.591	-0.308	-0.398	-0.291	-0.221
	-0.725	-0.666	-0.503	-0.501	-0.326	-0.219	-0.180		-0.783	-0.627	0.477	-0.173	-0.142	0.692
	-0.177	-0.153	-0.852	-0.741	-0.691	-0.609	-0.741		0.564	0.397	0.477	-0.173	-0.142	0.692
	INST-560 PM-1 IN-22 65:11													
	10-PRESSUITS													
0	SUM:SEC													
	6611	2227.6	573.4	4.883	65.7	0.002653	0.061	0	945	-0.617	-0.342	-0.427	-0.324	-0.255
	-0.607	-0.607	-0.625	-0.532	-0.408	-0.242	-0.195		-0.801	-0.651	-0.617	-0.150	-0.179	-0.451
	-1.209	-0.171	-0.831	-0.748	-0.695	-0.717	-0.777		-0.256	-0.656	-0.611	-0.150	-0.179	-0.451

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10 JAN 83 17:43

PAGE 10

10 JAN 83 17:43

0	0.653	2177.7	2160.7	645.3	5.052	75.4	0.002554	0.056	0	1054	-0.698	-0.615	-0.509	-0.396	-0.317
	-0.437	-0.701	-0.592	-0.477	-0.390	-0.334	-0.285	-0.252	-0.890	-0.741	-0.374	-0.241	-0.247	-0.240	-0.217
	-0.266	-0.229	-0.511	-0.844	-0.788	-0.796	-0.843	-0.860	-0.315	-0.394	-0.368	-0.232	-0.245	-0.237	-0.274

0	RUN:SEC														
	71:2														
0	0.554	2367.6	2152.1	443.7	5.028	76.1	0.002561	0.037	0	1056	-0.686	-0.623	-0.517	-0.404	-0.323
	-0.842	-0.712	-0.705	-0.595	-0.475	-0.386	-0.323	-0.273	-0.880	-0.726	-0.364	-0.232	-0.245	-0.237	-0.274
	-0.269	-0.224	-0.520	-0.847	-0.785	-0.793	-0.788	-0.834	-0.311	-0.368	-0.364	-0.232	-0.245	-0.237	-0.274

0	RUN:SEC														
	72:1														
0	0.654	3572.0	2680.5	802.0	6.136	81.3	0.003134	0.052	0	1100	-0.710	-0.639	-0.523	-0.416	-0.338
	-0.355	-0.722	-0.617	-0.458	-0.413	-0.345	-0.298	-0.262	-0.898	-0.739	-0.938	-0.833	-0.760	-0.751	-0.859
	-0.282	-0.251	-0.949	-0.873	-0.812	-0.819	-0.863	-0.877	-0.887	-0.946	-0.938	-0.833	-0.760	-0.751	-0.859

0	RUN:SEC														
	72:2														
0	0.655	3555.3	2685.0	797.5	6.136	82.6	0.003113	0.055	0	1103	-0.702	-0.634	-0.531	-0.417	-0.335
	-0.655	-0.729	-0.715	-0.515	-0.456	-0.409	-0.337	-0.287	-0.891	-0.735	-0.924	-0.820	-0.758	-0.755	-0.846
	-0.278	-0.242	-0.952	-0.884	-0.804	-0.808	-0.802	-0.851	-0.874	-0.931	-0.924	-0.820	-0.758	-0.755	-0.846

1751-560 PM-1 IN-22 7311
10-PRESSUITS
PAGE 13

0	RUN:SEC														
	72:1														
0	0.651	4177.5	3366.6	765.3	83.9	85.9	0.003902	0.096	0	1108	-0.739	-0.673	-0.558	-0.441	-0.359
	-0.689	-0.757	-0.748	-0.643	-0.513	-0.427	-0.353	-0.305	-0.271	-0.774	-0.759	-0.673	-0.558	-0.441	-0.359
	-0.392	-0.265	-0.967	-0.854	-0.825	-0.844	-0.849	-0.889	-0.928	-1.201	-1.446	-1.363	-0.277	-0.264	-1.367

0	RUN:SEC														
	72:2														
0	0.652	4177.1	3365.1	761.9	87.9	88.9	0.003885	0.046	0	1111	-0.721	-0.656	-0.552	-0.437	-0.350
	-0.672	-0.741	-0.729	-0.623	-0.500	-0.407	-0.342	-0.293	-0.241	-0.907	-0.744	-0.656	-0.552	-0.437	-0.350
	-0.222	-0.258	-0.953	-0.874	-0.825	-0.839	-0.821	-0.874	-0.892	-1.322	-1.397	-1.317	-0.268	-0.256	-1.326

1751-560 PM-1 TR-22 10011
10-PRESSUITS
PAGE 14

0	RUN:SEC														
	100:1														
0	0.653	2521.1	2193.9	654.0	5.060	80.9	0.002566	0.056	2	1444	-0.696	-0.601	-0.490	-0.384	-0.315
	-0.824	-0.657	-0.689	-0.597	-0.470	-0.375	-0.313	-0.265	-0.233	-0.711	-0.696	-0.601	-0.490	-0.384	-0.315
	-0.252	-0.228	-0.922	-0.838	-0.774	-0.774	-0.799	-0.851	-0.865	-0.214	-0.218	-0.219	-0.218	-0.218	-0.227

0	RUN:SEC														
	100:2														
0	0.652	3522.5	2197.2	652.9	5.052	81.1	0.002569	0.051	2	1445	-0.699	-0.612	-0.497	-0.391	-0.318
	-0.835	-0.701	-0.701	-0.604	-0.480	-0.395	-0.316	-0.266	-0.236	-0.890	-0.728	-0.699	-0.612	-0.497	-0.318
	-0.264	-0.223	-0.926	-0.825	-0.794	-0.786	-0.802	-0.852	-0.879	-0.220	-0.226	-0.224	-0.224	-0.219	-0.231

1 1757-560 P1-1 1A-22 7831 10-PRESSOUT3 10 JAN 8321756 PAGE 0
 OF 1A 1 95 INANSMI PLAN3 TAPE=WARDE9
 1757-560 P1-1 1A-22 7831 10-PRESSOUT3 10 JAN 8321756 PAGE 1
 0 RUN:SFU

0 0.651 2128.5 1601.5 476.5 3.832 64.0 0.001933 0.054 100. 927
 -0.020 -0.649 -0.640 -0.596 -0.472 -0.382 -0.300 -0.256 -0.224 -0.084 -0.711 -0.672 -0.594 -0.485 -0.374 -0.314
 -0.225 -0.225 -0.921 -0.921 -0.771 -0.771 -0.786 -0.830 -0.834 -0.211 -0.187 -0.216 -0.214 -0.211 -0.218
 -0.722 -0.642 -0.506 -0.395 -0.321 -0.714 -0.614 -0.506 -0.399 -0.320 -0.730 -0.622 -0.502 -0.400 -0.312

0 RUN:SEU
 7832
 0 0.651 2128.2 1600.3 475.2 3.830 64.4 0.001930 0.057 100. 928
 -0.798 -0.671 -0.667 -0.558 -0.438 -0.357 -0.222 -0.222 -0.222 -0.875 -0.714 -0.677 -0.589 -0.473 -0.367 -0.300
 -0.752 -0.221 -0.894 -0.823 -0.768 -0.760 -0.817 -0.817 -0.852 -0.207 -0.183 -0.211 -0.210 -0.203 -0.200 -0.237
 -0.711 -0.620 -0.502 -0.354 -0.322 -0.718 -0.617 -0.502 -0.403 -0.319 -0.725 -0.616 -0.500 -0.399 -0.316

0 RUN:SEC
 7931
 0 0.652 2157.2 2195.1 640.8 5.101 68.4 0.002566 0.060 100. 930
 -0.744 -0.713 -0.705 -0.592 -0.471 -0.384 -0.318 -0.273 -0.239 -0.085 -0.720 -0.695 -0.602 -0.497 -0.385 -0.309
 -0.757 -0.221 -0.523 -0.836 -0.784 -0.753 -0.780 -0.830 -0.868 -0.211 -0.189 -0.213 -0.210 -0.210 -0.210 -0.222
 -0.770 -0.532 -0.516 -0.403 -0.328 -0.749 -0.647 -0.524 -0.416 -0.328 -0.737 -0.656 -0.537 -0.424 -0.330

0 RUN:SEC
 7932
 0 0.652 2041.1 2136.1 632.3 5.039 71.0 0.002543 0.050 100. 934
 -0.860 -0.729 -0.718 -0.612 -0.489 -0.396 -0.325 -0.277 -0.243 -0.086 -0.724 -0.694 -0.623 -0.510 -0.395 -0.320
 -0.769 -0.224 -0.474 -0.862 -0.807 -0.703 -0.813 -0.855 -0.878 -0.225 -0.201 -0.221 -0.223 -0.224 -0.223 -0.237
 -0.753 -0.652 -0.534 -0.428 -0.341 -0.758 -0.658 -0.533 -0.434 -0.346 -0.769 -0.666 -0.546 -0.428 -0.342

1757-560 P1-1 1A-22 8031 10-PRESSOUT3 10 JAN 8321756 PAGE 2
 0 RUN:SEU
 8031
 0 0.652 3540.6 2059.9 792.7 6.204 76.5 0.003137 0.043 100. 938
 -0.861 -0.729 -0.721 -0.615 -0.493 -0.407 -0.338 -0.292 -0.260 -0.096 -0.746 -0.717 -0.638 -0.525 -0.416 -0.342
 -0.787 -0.221 -0.957 -0.872 -0.814 -0.794 -0.814 -0.866 -0.908 -0.242 -0.216 -0.244 -0.251 -0.238 -0.231 -0.244
 -0.757 -0.647 -0.539 -0.429 -0.348 -0.770 -0.669 -0.552 -0.445 -0.359 -0.781 -0.680 -0.559 -0.446 -0.353

0 RUN:SEC
 8032
 0 0.651 3245.2 2067.2 790.9 6.199 76.2 0.003146 0.038 100. 943
 -0.867 -0.731 -0.725 179.8 -0.503 -0.416 -0.339 -0.289 -0.239 213.3 -0.741 -0.718 -0.637 -0.523 -0.416 126.9
 -0.242 -0.248 -0.955 -0.870 -0.814 196.2 -0.814 -0.862 -0.899 -0.242 -0.216 112.9 -0.249 -0.243 -0.235 -0.245
 -0.761 178.6 -0.532 -0.429 -0.352 -0.779 -0.686 161.7 -0.455 -0.361 -0.782 -0.686 -0.568 144.7 -0.357

0	0.750	2125.0	1464.5	576.0	4.027	70.4	0.001764	0.033	100	1113	-0.283	-0.202	-0.232	-0.131	-0.126	
	-0.522	-0.374	-0.261	-0.212	-0.186	-0.159	-0.129	-0.116	-0.099	-0.607	-0.309	-0.126	-0.170	-0.109	-0.124	
	-0.124	-0.102	-0.804	-0.742	-0.677	-0.602	-0.670	-0.720	-0.763	-0.114	-0.103	-0.216	-0.145	-0.116	-0.113	
	-0.351	-0.238	-0.168	-0.135	-0.123	-0.301	-0.245	-0.169	-0.132	-0.120	-0.368	-0.210	-0.195	-0.116	-0.113	
0	RUN1SEC															
	0.751	2125.9	1461.3	576.7	4.036	77.5	0.001764	0.028	100	1117	-0.297	-0.210	-0.241	-0.138	-0.133	
	-0.574	-0.381	-0.265	-0.216	-0.182	-0.153	-0.139	-0.129	-0.112	-0.615	-0.402	-0.112	-0.103	-0.095	-0.115	
	-0.120	-0.108	-0.805	-0.744	-0.669	-0.673	-0.661	-0.722	-0.733	-0.100	-0.086	-0.112	-0.103	-0.095	-0.115	
	-0.351	-0.228	-0.157	-0.128	-0.121	-0.302	-0.238	-0.161	-0.127	-0.112	-0.366	-0.240	-0.161	-0.132	-0.122	
0	RUN1SEC															
	0.752	2236.2	1543.6	770.9	5.230	81.1	0.002332	0.023	100	1120	-0.319	-0.224	-0.233	-0.151	-0.138	
	-0.551	-0.405	-0.283	-0.226	-0.200	-0.175	-0.151	-0.143	-0.124	-0.643	-0.427	-0.122	-0.124	-0.120	-0.134	
	-0.124	-0.113	-0.815	-0.763	-0.703	-0.691	-0.673	-0.742	-0.769	-0.130	-0.119	-0.122	-0.131	-0.120	-0.139	
	-0.371	-0.247	-0.181	-0.153	-0.130	-0.427	-0.277	-0.184	-0.146	-0.131	-0.410	-0.266	-0.181	-0.142	-0.129	
0	RUN1SEC															
	0.752	2236.0	1549.2	771.4	5.237	82.6	0.002331	0.026	100	1124	-0.225	-0.236	-0.258	-0.152	-0.138	
	-0.527	-0.353	-0.277	-0.221	-0.192	-0.170	-0.152	-0.143	-0.123	-0.631	-0.419	-0.123	-0.117	-0.112	-0.120	
	-0.124	-0.112	-0.829	-0.771	-0.707	-0.697	-0.690	-0.731	-0.758	-0.120	-0.107	-0.123	-0.136	-0.130	-0.134	
	-0.380	-0.252	-0.176	-0.144	-0.134	-0.413	-0.269	-0.178	-0.138	-0.126	-0.421	-0.276	-0.183	-0.139	-0.125	
	1157-60 Ph-1 TA-22 65:1 10-PRESSOUT3 PAGE 5															
0	RUN1SEC															
	0.751	3710.9	2552.5	6.081	97.0	0.003023	0.018	100	1124	-0.244	-0.237	-0.264	-0.160	-0.147	-0.145	
	-0.561	-0.418	-0.297	-0.245	-0.222	-0.194	-0.156	-0.137	-0.124	-0.666	-0.449	-0.144	-0.136	-0.130	-0.140	
	-0.141	-0.119	-0.842	-0.787	-0.714	-0.722	-0.706	-0.775	-0.775	-0.136	-0.123	-0.144	-0.136	-0.130	-0.140	
	-0.407	-0.270	-0.191	-0.158	-0.156	-0.438	-0.293	-0.202	-0.159	-0.147	-0.453	-0.297	-0.204	-0.161	-0.145	
0	RUN1SEC															
	0.750	2112.9	2227.5	6.878	87.8	0.003028	0.015	100	1131	-0.251	-0.276	-0.276	-0.171	-0.158	-0.147	
	-0.567	-0.423	-0.300	-0.248	-0.221	-0.194	-0.161	-0.156	-0.130	-0.675	-0.454	-0.143	-0.135	-0.129	-0.142	
	-0.153	-0.120	-0.844	-0.797	-0.732	-0.728	-0.704	-0.772	-0.786	-0.135	-0.124	-0.143	-0.135	-0.129	-0.142	
	-0.415	-0.270	-0.186	-0.154	-0.151	-0.452	-0.306	-0.210	-0.166	-0.148	-0.451	-0.302	-0.208	-0.165	-0.150	
0	RUN1SEC															
	0.859	2116.3	1306.7	675.4	4.305	76.9	0.001629	0.014	100	1240	-0.114	-0.093	-0.169	-0.071	-0.074	
	-0.215	-0.169	-0.125	-0.100	-0.089	-0.078	-0.056	-0.041	-0.042	-0.269	-0.139	-0.114	-0.093	-0.169	-0.071	
	-0.119	-0.054	-0.471	-0.412	-0.258	-0.617	-0.627	-0.631	-0.667	-0.049	-0.054	-0.054	-0.049	-0.045	-0.052	

0 -0.101 -0.021 -0.070 -0.060 -0.060 -0.100 -0.077 -0.072 -0.070 -0.060 -0.115 -0.083 -0.075 -0.078 -0.076

RUN:SF0

0 87:2 2121.0 1320.0 670.4 4.281 78.5 0.001637 0.013 100 1245
-0.201 -0.155 -0.115 -0.091 -0.080 -0.069 -0.051 -0.047 -0.258 -0.131 -0.107 -0.077 -0.153 -0.097 -0.080
-0.065 -0.047 -0.039 -0.032 -0.028 -0.024 -0.020 -0.018 -0.050 -0.036 -0.020 -0.016 -0.050 -0.038 -0.029
-0.105 -0.085 -0.076 -0.073 -0.066 -0.103 -0.075 -0.070 -0.067 -0.065 -0.101 -0.070 -0.065 -0.070 -0.069

LIST-560 P1-17-22 87:3 ID-PRESSQUIT 10 JAN 83 217:56 PAGE 6

RUN:SF0

0 0:249 2121.0 1320.0 670.4 4.274 78.7 0.001639 0.010 100 1245
-0.222 -0.172 -0.126 -0.109 -0.094 -0.083 -0.054 -0.041 -0.260 -0.135 -0.111 -0.079 -0.153 -0.099 -0.083
-0.068 -0.044 -0.042 -0.043 -0.037 -0.034 -0.032 -0.031 -0.058 -0.049 -0.064 -0.059 -0.053 -0.066 -0.077
-0.113 -0.093 -0.082 -0.081 -0.068 -0.106 -0.078 -0.073 -0.070 -0.069 -0.106 -0.073 -0.066 -0.071 -0.068

RUN:SF0

0 0:215 2030.5 1437.6 836.6 3.220 67.4 0.001999 0.012 100 1255
-0.073 -0.049 -0.049 -0.049 -0.049 -0.049 -0.049 -0.049 -0.062 -0.058 -0.064 -0.058 -0.053 -0.066 -0.078
-0.110 -0.082 -0.082 -0.082 -0.082 -0.082 -0.082 -0.082 -0.072 -0.072 -0.083 -0.076 -0.071 -0.075 -0.075

RUN:SF0

0 0:091 3170.0 1979.3 6:302 85.9 0.002421 0.013 100 1305
-0.212 -0.172 -0.129 -0.100 -0.085 -0.075 -0.072 -0.062 -0.294 -0.157 -0.132 -0.099 -0.182 -0.077 -0.075
-0.079 -0.059 -0.059 -0.049 -0.046 -0.046 -0.046 -0.046 -0.059 -0.050 -0.059 -0.054 -0.051 -0.066 -0.078
-0.117 -0.091 -0.080 -0.079 -0.077 -0.124 -0.069 -0.077 -0.074 -0.117 -0.083 -0.076 -0.075 -0.075

RUN:SF0

0 0:448 2157.7 1971.7 6:277 89.4 0.002425 0.008 100 1310
-0.235 -0.167 -0.142 -0.112 -0.101 -0.091 -0.073 -0.060 -0.269 -0.153 -0.131 -0.097 -0.178 -0.074 -0.071
-0.075 -0.051 -0.070 -0.056 -0.049 -0.038 -0.044 -0.056 -0.076 -0.061 -0.063 -0.057 -0.054 -0.070 -0.082
-0.170 -0.033 -0.022 -0.064 -0.080 -0.126 -0.092 -0.080 -0.078 -0.077 -0.128 -0.090 -0.092 -0.078 -0.077

LINE COUNT = 153

0	0.652	404.9	304.0	904.6	6.863	89.3	0.033501	0.043	1	1022	-0.917	-0.762	-0.726	-0.649	-0.533	-0.425	-0.310
	-0.843	-0.714	-0.729	-0.628	-0.508	-0.418	-0.348	-0.294	-0.260	-0.238	-0.222	-0.242	-0.243	-0.261	-0.238	-0.231	
	-0.294	-0.255	-0.946	-0.866	-0.811	-0.809	-0.830	-0.867	-0.890	-0.911							
0	RUN:SEC																
	102:16																
0	0.651	404.8	304.9	903.0	6.856	89.4	0.003503	0.042	1	1023	-0.911	-0.748	-0.716	-0.646	-0.532	-0.421	-0.346
	-0.859	-0.713	-0.721	-0.621	-0.501	-0.405	-0.338	-0.290	-0.256	-0.236	-0.229	-0.243	-0.241	-0.240	-0.235	-0.251	
	-0.293	-0.256	-0.952	-0.872	-0.813	-0.802	-0.828	-0.877	-0.897	-0.911							
0	RUN:SEC																
	102:17																
0	0.651	404.7	304.7	903.1	6.851	89.7	0.003500	0.044	1	1023	-0.918	-0.763	-0.725	-0.644	-0.527	-0.415	-0.347
	-0.850	-0.717	-0.728	-0.632	-0.501	-0.413	-0.341	-0.293	-0.256	-0.232	-0.216	-0.238	-0.239	-0.233	-0.239	-0.253	
	-0.287	-0.250	-0.944	-0.865	-0.813	-0.803	-0.823	-0.870	-0.880	-0.911							
0	RUN:SEC																
	102:18																
0	0.650	404.7	304.3	901.9	6.847	89.8	0.003503	0.039	1	1024	-0.923	-0.757	-0.727	-0.645	-0.528	-0.419	-0.347
	-0.870	-0.722	-0.734	-0.635	-0.506	-0.419	-0.348	-0.299	-0.266	-0.231	-0.211	-0.239	-0.238	-0.236	-0.239	-0.251	
	-0.254	-0.256	-0.953	-0.878	-0.821	-0.805	-0.838	-0.877	-0.885	-0.911							
	LIST:60 P1-1 JAN-22 102:19																
	ID-PRESSCITE																
0	RUN:SEC																
	102:19																
0	0.652	404.7	303.2	905.8	6.855	90.0	0.003455	0.045	1	1024	-0.898	-0.745	-0.708	-0.649	-0.527	-0.423	-0.352
	-0.857	-0.715	-0.728	-0.627	-0.503	-0.413	-0.334	-0.285	-0.250	-0.238	-0.222	-0.245	-0.243	-0.243	-0.235	-0.244	
	-0.298	-0.255	-0.939	-0.825	-0.804	-0.789	-0.819	-0.863	-0.899	-0.911							
0	RUN:SEC																
	102:20																
0	0.652	404.3	302.5	904.5	6.846	90.2	0.003494	0.078	1	1025	-0.913	-0.753	-0.719	-0.644	-0.533	-0.421	-0.347
	-0.951	-0.716	-0.727	-0.631	-0.504	-0.416	-0.350	-0.299	-0.264	-0.240	-0.224	-0.246	-0.248	-0.243	-0.231	-0.244	
	-0.294	-0.257	-0.938	-0.853	-0.818	-0.810	-0.833	-0.871	-0.882	-0.911							
0	RUN:SEC																
	102:21																
0	0.645	405.0	302.5	900.3	6.903	86.3	0.003533	0.041	1	1228	-0.920	-0.739	-0.728	-0.636	-0.525	-0.416	-0.342
	-0.874	-0.737	-0.728	-0.635	-0.510	-0.421	-0.339	-0.288	-0.253	-0.239	-0.222	-0.246	-0.244	-0.243	-0.240	-0.247	
	-0.288	-0.250	-0.942	-0.815	-0.829	-0.801	-0.828	-0.877	-0.917	-0.911							
0	RUN:SEC																
	102:22																
0	0.652	405.4	304.3	905.8	6.915	86.8	0.003526	0.039	1	1229	-0.911	-0.737	-0.721	-0.631	-0.515	-0.405	-0.333
	-0.870	-0.732	-0.726	-0.626	-0.500	-0.407	-0.325	-0.282	-0.248	-0.232	-0.217	-0.239	-0.237	-0.232	-0.232	-0.244	
	-0.281	-0.252	-0.931	-0.858	-0.811	-0.779	-0.813	-0.864	-0.898	-0.911							

0 RUN:SEC
 10322
 0 0.651 4046.1 3042.2 903.8 6.894 87.2 0.003517 0.040 1 1230
 -0.914 -0.730 -0.722 -0.628 -0.506 -0.418 -0.343 -0.292 -0.259 -0.923 -0.752 -0.731 -0.647 -0.533 -0.429 -0.351
 -0.257 -0.255 -0.557 -0.859 -0.814 -0.802 -0.621 -0.870 -0.829 -0.229 -0.216 -0.237 -0.236 -0.234 -0.231 -0.241

0 RUN:SEC
 10324
 0 0.652 4035.3 3032.3 902.8 6.876 87.9 0.003502 0.041 1 1230
 -0.911 -0.725 -0.718 -0.615 -0.489 -0.402 -0.344 -0.292 -0.259 -0.929 -0.744 -0.734 -0.638 -0.521 -0.405 -0.332
 -0.280 -0.257 -0.249 -0.871 -0.820 -0.807 -0.627 -0.877 -0.870 -0.224 -0.211 -0.232 -0.230 -0.229 -0.228 -0.248

0 RUN:SEC
 10325
 0 0.652 4039.3 3036.0 902.3 6.864 88.3 0.003503 0.035 1 1231
 -0.911 -0.725 -0.710 -0.627 -0.501 -0.412 -0.337 -0.283 -0.248 -0.902 -0.741 -0.705 -0.641 -0.523 -0.412 -0.341
 -0.287 -0.259 -0.549 -0.872 -0.815 -0.794 -0.639 -0.874 -0.883 -0.221 -0.201 -0.221 -0.226 -0.224 -0.229 -0.239

0 RUN:SEC
 10326
 0 0.650 4045.7 3049.1 901.3 6.866 88.7 0.003514 0.041 1 1232
 -0.923 -0.736 -0.777 -0.631 -0.509 -0.415 -0.344 -0.294 -0.261 -0.919 -0.759 -0.724 -0.633 -0.510 -0.402 -0.332
 -0.275 -0.244 -0.959 -0.819 -0.814 -0.822 -0.637 -0.885 -0.887 -0.234 -0.223 -0.242 -0.240 -0.243 -0.234 -0.245

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0 RUN:SEC
 10412
 0 0.653 4036.4 3033.1 904.5 6.559 82.8 0.003536 0.041 11 1412
 -0.927 -0.744 -0.736 -0.624 -0.503 -0.418 -0.348 -0.298 -0.264 -0.922 -0.767 -0.730 -0.650 -0.536 -0.419 -0.343
 -0.287 -0.250 -0.544 -0.877 -0.824 -0.791 -0.625 -0.871 -0.912 -0.245 -0.229 -0.245 -0.243 -0.243 -0.239 -0.251

0 RUN:SEC
 10413
 0 0.651 4044.5 3042.8 902.1 6.925 84.8 0.003532 0.050 12 1526
 -0.939 -0.725 -0.724 -0.615 -0.494 -0.401 -0.336 -0.286 -0.252 -0.915 -0.736 -0.721 -0.636 -0.518 -0.411 -0.336
 -0.282 -0.247 -0.947 -0.871 -0.810 -0.786 -0.623 -0.876 -0.899 -0.224 -0.209 -0.229 -0.227 -0.224 -0.226 -0.237

0 RUN:SEC
 10414
 0 0.652 4034.8 3047.0 907.1 6.980 83.2 0.003549 0.047 13 1038
 -0.906 -0.744 -0.730 -0.639 -0.513 -0.426 -0.354 -0.303 -0.268 -0.928 -0.761 -0.730 -0.656 -0.543 -0.424 -0.349
 -0.242 -0.254 -0.929 -0.876 -0.821 -0.822 -0.620 -0.869 -0.902 -0.239 -0.226 -0.240 -0.239 -0.238 -0.240 -0.248

0 RUN:SEC
 10415

0	0.015	4046.5	2025.9	910.7	6.255	85.1	0.00326	0.039	2	1234	-0.927	-0.742	-0.537	-0.423	-0.348
	-0.094	-0.741	-0.737	-0.621	-0.458	-0.408	-0.346	-0.297			-0.260	-0.242	-0.241	-0.233	-0.244
	-0.251	-0.222	-0.557	-0.871	-0.821	-0.795	-0.831	-0.904			-0.233	-0.221			
	10-PRESSOUTS														
	10 JAN 83 17:43														
	10-PRESSOUTS														

0	0.052	4040.4	2032.8	904.4	6.872	88.9	0.003497	0.046	2	1238	-0.928	-0.759	-0.525	-0.410	-0.333
	-0.065	-0.728	-0.724	-0.623	-0.496	-0.405	-0.343	-0.292			-0.258	-0.238	-0.231	-0.224	-0.245
	-0.275	-0.241	-0.534	-0.871	-0.824	-0.811	-0.841	-0.894			-0.232	-0.216	-0.211	-0.202	-0.211
	10-PRESSOUTS														
	10 JAN 83 17:43														
	10-PRESSOUTS														

0	0.053	4042.0	2035.7	905.6	6.857	89.7	0.003495	0.042	2	1239	-0.918	-0.741	-0.519	-0.428	-0.348
	-0.064	-0.726	-0.722	-0.620	-0.494	-0.404	-0.338	-0.293			-0.259	-0.244	-0.244	-0.234	-0.255
	-0.291	-0.252	-0.562	-0.889	-0.824	-0.812	-0.837	-0.879			-0.242	-0.225	-0.224	-0.214	-0.224
	10-PRESSOUTS														
	10 JAN 83 17:43														
	10-PRESSOUTS														

0	0.054	4041.9	2032.1	900.4	6.853	90.5	0.003486	0.048	2	1240	-0.917	-0.740	-0.524	-0.410	-0.334
	-0.077	-0.736	-0.735	-0.639	-0.513	-0.419	-0.339	-0.293			-0.259	-0.244	-0.246	-0.227	-0.244
	-0.279	-0.242	-0.557	-0.874	-0.824	-0.810	-0.837	-0.879			-0.241	-0.224	-0.224	-0.214	-0.224
	10-PRESSOUTS														
	10 JAN 83 17:43														
	10-PRESSOUTS														

0	0.052	4043.5	2031.6	910.0	6.842	91.7	0.003479	0.044	2	1241	-0.916	-0.737	-0.539	-0.423	-0.341
	-0.066	-0.729	-0.725	-0.625	-0.500	-0.405	-0.341	-0.291			-0.258	-0.237	-0.240	-0.238	-0.240
	-0.287	-0.251	-0.564	-0.882	-0.825	-0.792	-0.831	-0.881			-0.236	-0.215	-0.237	-0.228	-0.240
	10-PRESSOUTS														
	10 JAN 83 17:43														
	10-PRESSOUTS														

0	0.057	2412.2	2179.4	658.6	5.082	79.5	0.002559	0.043	8	1401	-0.760	-0.705	-0.488	-0.390	-0.343
	-0.024	-0.249	-0.626	-0.505	-0.409	-0.304	-0.253	-0.222			-0.199	-0.243	-0.247	-0.218	-0.209
	-0.250	-0.249	-0.898	-0.826	-0.749	-0.626	-0.828	-0.839			-0.208	-0.243	-0.247	-0.218	-0.209
	10-PRESSOUTS														
	10 JAN 83 17:43														
	10-PRESSOUTS														

0	0.051	2441.1	2212.2	656.3	5.078	81.4	0.002584	0.049	6	1409	-0.898	-0.746	-0.596	-0.374	-0.332
	-0.037	-0.473	-0.617	-0.454	-0.397	-0.297	-0.245	-0.214			-0.188	-0.178	-0.220	-0.202	-0.206
	-0.240	-0.243	-0.820	-0.526	-0.484	-0.384	-0.816	-0.823			-0.188	-0.178	-0.221	-0.202	-0.206
	10-PRESSOUTS														
	10 JAN 83 17:43														
	10-PRESSOUTS														

0	0.052	2554.5	2205.5	656.0	5.059	82.7	0.002571	0.049	8	1411	-0.892	-0.752	-0.697	-0.371	-0.332
	-0.031	-0.471	-0.611	-0.451	-0.397	-0.297	-0.243	-0.213			-0.189	-0.189	-0.229	-0.207	-0.205
	-0.278	-0.240	-0.877	-0.693	-0.612	-0.512	-0.813	-0.814			-0.192	-0.189	-0.231	-0.207	-0.205
	10-PRESSOUTS														
	10 JAN 83 17:43														
	10-PRESSOUTS														

0	0.654	2521.6	2191.4	494.7	4.978	88.4	0.002529	0.047	1427	-0.756	-0.701	-0.589	-0.475	-0.373	-0.334
	-0.817	-0.668	-0.614	-0.497	-0.397	-0.297	-0.244	-0.214		-0.188	-0.234	-0.235	-0.234	-0.196	-0.200
	-0.280	-0.241	-0.874	-0.788	-0.788	-0.808	-0.843	-0.832		-0.193	-0.234	-0.235	-0.234	-0.196	-0.200
0	RUN:SEC														
	109:12														
0	0.654	2922.2	2193.0	656.1	4.992	87.1	0.002537	0.053	1431	-0.748	-0.704	-0.594	-0.470	-0.363	-0.328
	-0.808	-0.665	-0.605	-0.481	-0.388	-0.294	-0.243	-0.212		-0.177	-0.223	-0.232	-0.232	-0.192	-0.194
	-0.280	-0.241	-0.874	-0.770	-0.762	-0.802	-0.836	-0.831		-0.191	-0.223	-0.232	-0.232	-0.192	-0.194
	1757-SEC PH-1	10-22	109:13												
0	RUN:SEC														
	109:13														
0	0.654	2921.5	2192.5	655.8	4.989	87.2	0.002536	0.049	1434	-0.743	-0.682	-0.591	-0.478	-0.373	-0.333
	-0.807	-0.664	-0.603	-0.488	-0.394	-0.286	-0.234	-0.205		-0.174	-0.222	-0.223	-0.220	-0.192	-0.195
	-0.280	-0.233	-0.863	-0.779	-0.779	-0.810	-0.845	-0.814		-0.186	-0.222	-0.223	-0.220	-0.192	-0.195
0	HLA:SEC														
	109:14														
0	0.652	2922.0	2192.6	653.8	4.974	88.6	0.002535	0.049	1436	-0.750	-0.698	-0.577	-0.459	-0.358	-0.316
	-0.809	-0.660	-0.615	-0.487	-0.389	-0.296	-0.245	-0.217		-0.177	-0.221	-0.222	-0.224	-0.200	-0.199
	-0.245	-0.229	-0.883	-0.675	-0.764	-0.807	-0.842	-0.819		-0.186	-0.221	-0.222	-0.224	-0.200	-0.199
0	RUN:SEC														
	109:15														
0	0.652	2921.6	2194.9	653.2	4.906	88.4	0.002539	0.053	1439	-0.743	-0.709	-0.584	-0.467	-0.363	-0.323
	-0.811	-0.666	-0.613	-0.491	-0.390	-0.288	-0.237	-0.208		-0.190	-0.223	-0.223	-0.226	-0.192	-0.192
	-0.272	-0.232	-0.874	-0.676	-0.769	-0.810	-0.842	-0.821		-0.190	-0.223	-0.223	-0.226	-0.192	-0.192
0	RUN:SEC														
	109:16														
0	0.651	2922.5	2199.2	651.4	4.957	88.8	0.002534	0.047	1441	-0.732	-0.685	-0.579	-0.465	-0.360	-0.318
	-0.809	-0.668	-0.603	-0.482	-0.392	-0.277	-0.229	-0.200		-0.174	-0.224	-0.227	-0.225	-0.193	-0.197
	-0.268	-0.230	-0.802	-0.623	-0.788	-0.819	-0.854	-0.824		-0.186	-0.224	-0.227	-0.225	-0.193	-0.197
	1757-SEC PH-1	10-22	109:17												
0	RUN:SEC														
	109:17														
0	0.650	2921.0	2198.8	650.5	4.947	89.2	0.002532	0.047	1443	-0.751	-0.705	-0.587	-0.472	-0.369	-0.325
	-0.808	-0.670	-0.602	-0.484	-0.390	-0.291	-0.241	-0.213		-0.182	-0.230	-0.231	-0.230	-0.195	-0.198
	-0.274	-0.233	-0.876	-0.678	-0.763	-0.810	-0.841	-0.811		-0.182	-0.230	-0.231	-0.230	-0.195	-0.198
0	HLA:SEC														
	110:2														
0	0.647	4037.1	3041.6	513.3	7.024	81.9	0.003533	0.051	1442	-0.747	-0.725	-0.641	-0.538	-0.417	-0.348
	-0.881	-0.728	-0.643	-0.522	-0.434	-0.355	-0.303	-0.265		-0.219	-0.238	-0.237	-0.237	-0.236	-0.245
	-0.242	-0.244	-0.870	-0.816	-0.799	-0.836	-0.880	-0.857		-0.233	-0.238	-0.237	-0.237	-0.236	-0.245

0 RUN:SEC
 110:4
 0 0.652 4037.9 3033.6 903.9 6.943 83.8 0.003530 0.042 16 824
 -0.876 -0.721 -0.737 -0.643 -0.517 -0.424 -0.350 -0.290 -0.260 -0.919 -0.773 -0.726 -0.653 -0.544 -0.431 -0.353
 -0.250 -0.259 -0.252 -0.875 -0.822 -0.806 -0.835 -0.878 -0.884 -0.239 -0.241 -0.243 -0.246 -0.243 -0.243 -0.256

0 RUN:SEC
 110:5
 0 0.654 4045.3 3034.2 909.5 6.935 85.9 0.003519 0.043 14 827
 -0.878 -0.722 -0.735 -0.644 -0.522 -0.427 -0.348 -0.296 -0.263 -0.923 -0.767 -0.726 -0.645 -0.539 -0.426 -0.349
 -0.290 -0.253 -0.242 -0.864 -0.816 -0.799 -0.838 -0.875 -0.895 -0.230 -0.228 -0.243 -0.245 -0.241 -0.241 -0.251
 1157-560 PP-1 TN-22 111:1 10-PRESSOUT
 0 RUN:SEC 10 JAN 83 17:43 PAGE 30

0 RUN:SEC
 111:1
 0 0.659 4041.1 3019.3 917.7 7.042 80.9 0.003538 0.044 16 934
 -0.722 -0.738 -0.734 -0.634 -0.508 -0.414 -0.343 -0.293 -0.262 -0.933 -0.743 -0.737 -0.643 -0.532 -0.417 -0.342
 -0.285 -0.245 -0.240 -0.540 -0.672 -0.826 -0.812 -0.833 -0.870 -0.898 -0.240 -0.220 -0.244 -0.242 -0.233 -0.243

0 RUN:SEC
 111:2
 0 0.652 4046.0 3043.2 905.3 6.938 85.0 0.003533 0.037 16 956
 -0.921 -0.736 -0.733 -0.640 -0.517 -0.419 -0.335 -0.286 -0.252 -0.917 -0.759 -0.721 -0.655 -0.543 -0.431 -0.353
 -0.258 -0.240 -0.240 -0.544 -0.685 -0.826 -0.798 -0.835 -0.876 -0.903 -0.241 -0.224 -0.246 -0.245 -0.247 -0.248

0 RUN:SEC
 111:3
 0 0.664 4046.9 3038.5 909.0 6.967 84.0 0.003535 0.042 16 938
 -0.917 -0.730 -0.725 -0.629 -0.509 -0.412 -0.339 -0.291 -0.258 -0.923 -0.755 -0.729 -0.676 -0.532 -0.419 -0.342
 -0.289 -0.222 -0.232 -0.871 -0.812 -0.808 -0.825 -0.878 -0.896 -0.232 -0.217 -0.240 -0.235 -0.238 -0.242 -0.250

0 RUN:SEC
 112:2
 0 0.652 4054.0 3048.1 905.7 6.930 85.9 0.003532 0.045 2 1111
 -0.926 -0.731 -0.742 -0.636 -0.510 -0.419 -0.331 -0.286 -0.253 -0.914 -0.750 -0.727 -0.645 -0.532 -0.418 -0.342
 -0.287 -0.251 -0.247 -0.875 -0.820 -0.809 -0.829 -0.875 -0.897 -0.235 -0.219 -0.237 -0.241 -0.242 -0.242 -0.249
 1157-560 PP-1 TN-22 112:3 10-PRESSOUT
 0 RUN:SEC 10 JAN 83 17:43 PAGE 31

0 RUN:SEC
 112:4
 0 0.654 4046.2 3035.6 909.0 6.938 85.6 0.003522 0.045 2 1113
 -0.914 -0.719 -0.730 -0.627 -0.499 -0.410 -0.344 -0.297 -0.263 -0.923 -0.759 -0.734 -0.656 -0.544 -0.431 -0.350
 -0.296 -0.256 -0.250 -0.540 -0.862 -0.816 -0.801 -0.822 -0.868 -0.906 -0.240 -0.226 -0.242 -0.246 -0.241 -0.249

0	0.654	4842.7	2022.3	508.9	6.914	86.9	0.003510	0.046	2	1115	-0.650	-0.534	-0.426	-0.348
	-0.884	-0.725	-0.741	-0.636	-0.511	-0.419	-0.364	-0.310		-0.938	-0.775	-0.741	-0.650	-0.534
	-0.250	-0.224	-0.527	-0.877	-0.821	-0.812	-0.836	-0.876		-0.230	-0.223	-0.244	-0.261	-0.236
0	MURASEU													
	11215													
0	0.654	4043.7	3035.7	900.6	6.891	88.4	0.003503	0.046	2	1117	-0.660	-0.548	-0.436	-0.349
	-0.873	-0.722	-0.734	-0.627	-0.504	-0.408	-0.344	-0.293		-0.916	-0.758	-0.724	-0.660	-0.548
	-0.248	-0.228	-0.565	-0.879	-0.821	-0.804	-0.837	-0.878		-0.238	-0.220	-0.238	-0.243	-0.237
0	MURASEC													
	11211													
0	0.654	4042.4	3033.6	907.6	6.863	89.7	0.003493	0.052	2	1119	-0.644	-0.534	-0.419	-0.339
	-0.871	-0.720	-0.730	-0.629	-0.504	-0.413	-0.341	-0.291		-0.912	-0.754	-0.723	-0.644	-0.534
	-0.227	-0.215	-0.564	-0.876	-0.829	-0.810	-0.838	-0.884		-0.230	-0.220	-0.234	-0.235	-0.236
	1151-560 Pr-1 IN-22 11217 10-PRESSOUTS PAGE 32													
0	MURASEC													
	11211													
0	0.654	4042.7	3033.7	907.7	6.854	90.4	0.003489	0.043	2	1121	-0.640	-0.530	-0.415	-0.338
	-0.883	-0.728	-0.738	-0.634	-0.505	-0.410	-0.348	-0.293		-0.909	-0.748	-0.721	-0.640	-0.530
	-0.220	-0.214	-0.544	-0.864	-0.815	-0.805	-0.828	-0.877		-0.240	-0.228	-0.244	-0.245	-0.237
	1151-560 Pr-1 IN-22 11217 10-PRESSOUTS PAGE 32													
0	MURASEC													
	11211													
0	0.652	4042.0	3027.2	904.4	6.819	91.8	0.003482	0.043	2	1123	-0.638	-0.525	-0.410	-0.335
	-0.867	-0.716	-0.725	-0.625	-0.500	-0.405	-0.337	-0.288		-0.910	-0.752	-0.717	-0.638	-0.525
	-0.275	-0.242	-0.534	-0.853	-0.804	-0.797	-0.811	-0.858		-0.229	-0.217	-0.227	-0.226	-0.231
0	MURASEC													
	11219													
0	0.650	4044.7	3043.8	901.4	6.799	92.6	0.003483	0.046	2	1125	-0.642	-0.528	-0.416	-0.334
	-0.876	-0.725	-0.738	-0.631	-0.505	-0.422	-0.339	-0.291		-0.912	-0.752	-0.725	-0.642	-0.528
	-0.276	-0.240	-0.534	-0.862	-0.811	-0.805	-0.828	-0.870		-0.232	-0.219	-0.239	-0.234	-0.236
0	MURASEC													
	11210													
0	0.652	4044.4	3037.5	906.2	6.807	93.1	0.003475	0.042	2	1127	-0.654	-0.538	-0.424	-0.347
	-0.882	-0.726	-0.730	-0.636	-0.509	-0.415	-0.336	-0.286		-0.912	-0.741	-0.719	-0.654	-0.538
	-0.225	-0.210	-0.527	-0.874	-0.814	-0.808	-0.824	-0.866		-0.232	-0.214	-0.234	-0.235	-0.232
	1151-560 Pr-1 IN-22 11211 10-PRESSOUTS PAGE 33													
0	MURASEC													
	11211													
0	0.651	4043.4	3040.9	902.6	6.784	93.7	0.003474	0.043	2	1129	-0.647	-0.535	-0.422	-0.345
	-0.868	-0.718	-0.726	-0.627	-0.505	-0.415	-0.338	-0.290		-0.917	-0.751	-0.724	-0.647	-0.535
	-0.287	-0.259	-0.549	-0.845	-0.810	-0.804	-0.822	-0.863		-0.231	-0.220	-0.232	-0.234	-0.234

0	0.652	4041.0	3038.0	903.6	6.776	94.4	0.003467	0.042	15	1254	-0.733	-0.659	-0.590	-0.437	-0.353
	-0.992	-0.740	-0.724	-0.639	-0.914	-0.422	-0.347	-0.298	-0.263	-0.924	-0.766	-0.650	-0.590	-0.437	-0.353
	-0.254	-0.255	-0.241	-0.862	-0.809	-0.191	-0.824	-0.863	-0.896	-0.237	-0.228	-0.241	-0.245	-0.240	-0.247
0	RUN:SEC														
	11214														
0	0.652	4043.6	3037.4	905.6	6.815	92.4	0.003479	0.047	15	1256	-0.729	-0.650	-0.537	-0.419	-0.344
	-0.879	-0.737	-0.731	-0.624	-0.501	-0.417	-0.348	-0.296	-0.260	-0.920	-0.757	-0.650	-0.537	-0.419	-0.344
	-0.249	-0.251	-0.289	-0.874	-0.821	-0.803	-0.833	-0.882	-0.899	-0.238	-0.221	-0.241	-0.243	-0.241	-0.248
0	RUN:SEC														
	11217														
0	0.652	4042.7	3037.6	904.7	6.799	53.2	0.003474	0.044	15	1238	-0.726	-0.645	-0.535	-0.419	-0.340
	-0.864	-0.726	-0.722	-0.620	-0.498	-0.409	-0.343	-0.296	-0.260	-0.923	-0.787	-0.645	-0.535	-0.419	-0.340
	-0.284	-0.248	-0.926	-0.869	-0.818	-0.804	-0.830	-0.868	-0.889	-0.241	-0.224	-0.245	-0.244	-0.236	-0.246
0	RUN:SEC														
	11218														
0	0.652	4044.0	3037.7	904.7	6.789	93.8	0.003470	0.044	15	1500	-0.747	-0.638	-0.531	-0.428	-0.346
	-0.849	-0.750	-0.723	-0.616	-0.453	-0.404	-0.337	-0.291	-0.255	-0.914	-0.747	-0.638	-0.531	-0.428	-0.346
	-0.295	-0.245	-0.538	-0.858	-0.803	-0.795	-0.819	-0.866	-0.895	-0.239	-0.223	-0.241	-0.244	-0.243	-0.238
	1151-560 FN-1 TA-22 11339 10-PRESSON13 PAGE 56														
0	RUN:SEC														
	11215														
0	0.652	4043.6	3038.0	903.1	6.782	94.4	0.003467	0.044	15	1501	-0.753	-0.636	-0.521	-0.408	-0.337
	-0.874	-0.735	-0.727	-0.627	-0.504	-0.416	-0.337	-0.289	-0.249	-0.909	-0.753	-0.636	-0.521	-0.408	-0.337
	-0.282	-0.242	-0.920	-0.859	-0.810	-0.809	-0.823	-0.862	-0.883	-0.231	-0.213	-0.231	-0.240	-0.232	-0.242
0	RUN:SEC														
	11210														
0	0.651	4044.0	3041.5	902.7	6.767	94.9	0.003467	0.045	15	1304	-0.729	-0.643	-0.534	-0.422	-0.348
	-0.870	-0.725	-0.727	-0.614	-0.488	-0.399	-0.338	-0.284	-0.251	-0.917	-0.753	-0.643	-0.534	-0.422	-0.348
	-0.250	-0.248	-0.323	-0.826	-0.811	-0.789	-0.823	-0.866	-0.900	-0.238	-0.226	-0.241	-0.244	-0.235	-0.242
0	RUN:SEC														
	11413														
0	0.651	2504.0	2184.5	647.0	5.004	82.2	0.002548	0.034	3	1422	-0.701	-0.610	-0.496	-0.383	-0.320
	-0.885	-0.700	-0.697	-0.604	-0.481	-0.389	-0.307	-0.257	-0.225	-0.902	-0.740	-0.610	-0.496	-0.383	-0.320
	-0.268	-0.230	-0.512	-0.820	-0.781	-0.774	-0.803	-0.836	-0.867	-0.205	-0.188	-0.219	-0.215	-0.203	-0.209
0	RUN:SEC														
	11412														
0	0.653	2522.0	2144.4	654.8	5.035	83.0	0.002357	0.048	3	1423	-0.697	-0.606	-0.495	-0.382	-0.315
	-0.870	-0.650	-0.634	-0.598	-0.478	-0.385	-0.301	-0.253	-0.221	-0.898	-0.731	-0.606	-0.495	-0.382	-0.315
	-0.262	-0.222	-0.511	-0.831	-0.788	-0.786	-0.811	-0.850	-0.881	-0.203	-0.189	-0.217	-0.219	-0.208	-0.215

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0	RUN:SEC	11412	2192.1	653.9	5.025	03.5	0.002554	0.050	3	1425	0.904	-0.747	-0.704	-0.609	-0.493	-0.379	-0.317
0	0.655	2919.7	2192.1	653.9	5.025	03.5	0.002554	0.050	3	1425	0.904	-0.747	-0.704	-0.609	-0.493	-0.379	-0.317
0	-0.881	-0.702	-0.696	-0.605	-0.485	-0.394	-0.308	-0.262	-0.232	-0.202	-0.173	-0.144	-0.115	-0.086	-0.057	-0.028	-0.000
0	-0.267	-0.221	-0.517	-0.824	-0.749	-0.794	-0.808	-0.850	-0.863	-0.879	-0.895	-0.911	-0.927	-0.943	-0.959	-0.975	-0.991

0	RUN:SEC	11424	2185.9	656.9	5.032	04.3	0.002543	0.052	3	1426	0.906	-0.753	-0.704	-0.601	-0.487	-0.374	-0.314
0	0.656	2516.5	2185.9	656.9	5.032	04.3	0.002543	0.052	3	1426	0.906	-0.753	-0.704	-0.601	-0.487	-0.374	-0.314
0	-0.873	-0.691	-0.606	-0.599	-0.479	-0.386	-0.316	-0.265	-0.232	-0.202	-0.173	-0.144	-0.115	-0.086	-0.057	-0.028	-0.000
0	-0.267	-0.221	-0.515	-0.822	-0.792	-0.801	-0.809	-0.845	-0.878	-0.912	-0.946	-0.980	-1.014	-1.048	-1.082	-1.116	-1.150

0	RUN:SEC	11412	2189.0	653.9	5.021	04.5	0.002543	0.053	3	1428	0.903	-0.727	-0.697	-0.607	-0.485	-0.369	-0.310
0	0.655	2918.9	2189.0	653.9	5.021	04.5	0.002543	0.053	3	1428	0.903	-0.727	-0.697	-0.607	-0.485	-0.369	-0.310
0	-0.877	-0.688	-0.679	-0.590	-0.471	-0.375	-0.305	-0.255	-0.223	-0.193	-0.164	-0.135	-0.106	-0.077	-0.048	-0.019	-0.000
0	-0.250	-0.221	-0.513	-0.825	-0.777	-0.784	-0.808	-0.850	-0.866	-0.900	-0.934	-0.968	-1.002	-1.036	-1.070	-1.104	-1.138

0	RUN:SEC	11412	2120.7	658.4	5.624	05.0	0.002543	0.061	3	1430	0.899	-0.735	-0.701	-0.602	-0.493	-0.376	-0.311
0	0.656	2920.9	2120.7	658.4	5.624	05.0	0.002543	0.061	3	1430	0.899	-0.735	-0.701	-0.602	-0.493	-0.376	-0.311
0	-0.884	-0.702	-0.698	-0.606	-0.484	-0.391	-0.308	-0.260	-0.227	-0.197	-0.168	-0.139	-0.110	-0.081	-0.052	-0.023	-0.000
0	-0.281	-0.227	-0.512	-0.826	-0.787	-0.793	-0.806	-0.842	-0.875	-0.908	-0.941	-0.974	-1.007	-1.040	-1.073	-1.106	-1.139

0	RUN:SEC	11417	2125.3	651.6	4.997	05.2	0.002547	0.047	3	1432	0.906	-0.739	-0.712	-0.607	-0.491	-0.378	-0.313
0	0.653	2914.2	2125.3	651.6	4.997	05.2	0.002547	0.047	3	1432	0.906	-0.739	-0.712	-0.607	-0.491	-0.378	-0.313
0	-0.872	-0.692	-0.684	-0.592	-0.471	-0.375	-0.311	-0.260	-0.227	-0.196	-0.167	-0.138	-0.109	-0.080	-0.051	-0.022	-0.000
0	-0.281	-0.226	-0.502	-0.823	-0.774	-0.781	-0.794	-0.834	-0.861	-0.894	-0.927	-0.960	-0.993	-1.026	-1.059	-1.092	-1.125

0	RUN:SEC	11412	2192.1	653.6	4.999	05.5	0.002543	0.053	3	1434	0.908	-0.732	-0.692	-0.604	-0.487	-0.375	-0.310
0	0.653	2918.3	2192.1	653.6	4.999	05.5	0.002543	0.053	3	1434	0.908	-0.732	-0.692	-0.604	-0.487	-0.375	-0.310
0	-0.877	-0.695	-0.690	-0.600	-0.477	-0.385	-0.301	-0.251	-0.219	-0.188	-0.157	-0.126	-0.095	-0.064	-0.033	-0.002	-0.000
0	-0.229	-0.222	-0.515	-0.823	-0.784	-0.768	-0.810	-0.840	-0.868	-0.896	-0.924	-0.952	-0.980	-1.008	-1.036	-1.064	-1.092

0	RUN:SEC	11412	2201.5	655.0	5.207	05.2	0.002623	0.059	4	928	0.896	-0.734	-0.696	-0.591	-0.475	-0.365	-0.307
0	0.654	2934.1	2201.5	655.0	5.207	05.2	0.002623	0.059	4	928	0.896	-0.734	-0.696	-0.591	-0.475	-0.365	-0.307
0	-0.883	-0.684	-0.682	-0.600	-0.472	-0.379	-0.303	-0.253	-0.220	-0.190	-0.160	-0.130	-0.100	-0.070	-0.040	-0.010	-0.000
0	-0.234	-0.215	-0.694	-0.817	-0.768	-0.773	-0.795	-0.837	-0.855	-0.895	-0.935	-0.975	-1.015	-1.055	-1.095	-1.135	-1.175

0 0.653 2520.3 2193.0 654.5 5.116 76.0 0.002589 0.046 4 945
 -0.879 -0.655 -0.613 -0.485 -0.393 -0.306 -0.260 -0.229 -0.914 -0.744 -0.714 -0.601 -0.491 -0.381 -0.324
 -0.272 -0.235 -0.515 -0.937 -0.706 -0.708 -0.824 -0.871 -0.211 -0.197 -0.230 -0.230 -0.233 -0.206 -0.213
 ATSI-560 PH-1 TN-22 11514 10-PRESSOUTS 10 JAN 8317143 PAGE 39
 0 RUA:SEC

0 0.652 2517.9 2191.6 653.7 5.097 77.3 0.002581 0.056 4 949
 -0.881 -0.698 -0.693 -0.602 -0.487 -0.394 -0.302 -0.254 -0.223 -0.906 -0.743 -0.707 -0.590 -0.477 -0.365 -0.305
 -0.254 -0.220 -0.902 -0.826 -0.777 -0.795 -0.819 -0.850 -0.880 -0.210 -0.194 -0.221 -0.224 -0.229 -0.206 -0.210
 0 MUA:SEC
 11512

0 0.653 2520.3 2192.8 654.6 5.070 80.0 0.002570 0.046 4 1006
 -0.864 -0.687 -0.682 -0.593 -0.470 -0.381 -0.312 -0.261 -0.230 -0.985 -0.744 -0.709 -0.604 -0.488 -0.376 -0.313
 -0.263 -0.229 -0.508 -0.929 -0.782 -0.784 -0.810 -0.845 -0.868 -0.198 -0.185 -0.219 -0.219 -0.222 -0.198 -0.207
 0 RUA:SEC
 11514

0 0.652 2919.6 2193.7 653.4 5.062 80.2 0.002569 0.048 4 1008
 -0.361 -0.559 -0.659 -0.609 -0.491 -0.396 -0.307 -0.255 -0.224 -0.903 -0.742 -0.710 -0.605 -0.492 -0.379 -0.317
 -0.267 -0.225 -0.509 -0.829 -0.780 -0.790 -0.815 -0.852 -0.864 -0.199 -0.183 -0.219 -0.216 -0.219 -0.208 -0.209
 0 MUA:SEC
 11517

0 0.655 2521.5 2194.1 654.4 5.065 80.4 0.002569 0.049 4 1022
 -0.875 -0.701 -0.702 -0.615 -0.492 -0.396 -0.315 -0.263 -0.233 -0.912 -0.754 -0.712 -0.613 -0.496 -0.384 -0.325
 -0.276 -0.229 -0.921 -0.828 -0.789 -0.793 -0.819 -0.857 -0.870 -0.208 -0.193 -0.228 -0.229 -0.228 -0.216 -0.216
 ATSI-560 PH-1 TN-22 11621 10-PRESSOUTS 10 JAN 8317143 PAGE 40
 0 RUA:SEC

0 0.654 2514.1 2188.6 654.5 5.136 74.2 0.002593 0.058 5 1220
 -0.883 -0.662 -0.673 -0.584 -0.462 -0.365 -0.293 -0.244 -0.200 -0.885 -0.716 -0.693 -0.602 -0.483 -0.372 -0.312
 -0.255 -0.220 -0.502 -0.827 -0.778 -0.790 -0.806 -0.845 -0.877 -0.200 -0.185 -0.219 -0.218 -0.217 -0.205 -0.210
 0 MUA:SEC
 11611

0 0.652 2524.8 2197.4 654.6 5.098 78.0 0.002584 0.049 5 1227
 -0.876 -0.655 -0.692 -0.602 -0.475 -0.383 -0.296 -0.249 -0.219 -0.894 -0.721 -0.694 -0.589 -0.469 -0.362 -0.303
 -0.257 -0.220 -0.500 -0.825 -0.777 -0.791 -0.800 -0.840 -0.871 -0.202 -0.182 -0.221 -0.220 -0.220 -0.208 -0.213
 0 RUA:SEC
 11612

0 0.653 2921.5 2194.0 654.7 5.065 80.5 0.002569 0.056 5 1244
 -0.859 -0.680 -0.679 -0.593 -0.474 -0.377 -0.296 -0.250 -0.220 -0.892 -0.722 -0.697 -0.595 -0.486 -0.380 -0.315
 -0.263 -0.226 -0.826 -0.821 -0.767 -0.771 -0.795 -0.836 -0.868 -0.199 -0.186 -0.218 -0.216 -0.216 -0.201 -0.204
 0 MUA:SEC
 11613

